

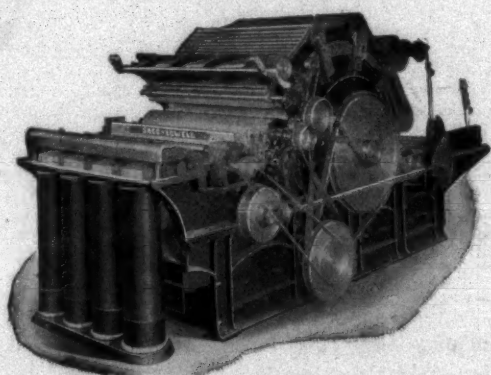
SOUTHERN TEXTILE BULLETIN

VOL. X

CHARLOTTE, N. C., OCTOBER 7, 1915

NUMBER 6

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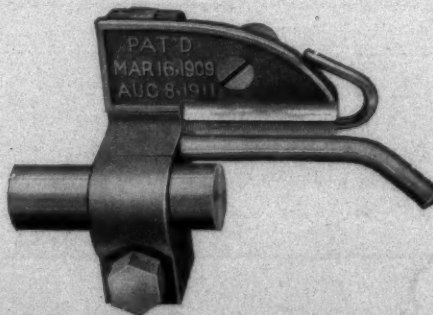
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SOUTHERN TEXTILE BULLETIN

VOLUME X

CHARLOTTE, N. C., OCTOBER 7, 1915

NUMBER 6

Ball-Bearings for Cotton Mills

Elliott A. Allen before National Association of Cotton Manufacturers.

(Continued from Last Week).

VII. Nappers.

Probably one of the earliest and most extensive applications of the modern ball bearing to textile machinery was made by the German napper builders some eight or more years ago. The severe service of the worker rolls produce journal friction, which consumed an excessive amount of power and destroyed the plain bearings. These rolls operated at high speeds, on account of their length, are subject to "whip" or "ballooning", which makes use of self-aligning bearings imperative.

self-aligning feature. Had a bearing of any other type been used, the some would have prematurely gone to pieces."

Which helps to explain why ball bearings in general are proving so popular in the cotton manufacturing industry.

VII. Stock and Yarn Dyers.

One of the vital principles in the rapid and uniform drying of stock and the yarn is the method of circulating and exhausting the air. The prime mover is the fan that keeps the air circulating, and the power, oil and attention required for its

but very little attention and at the same time be exceedingly light running. It will be readily appreciated that if vibration occurs in the fan, any shake will be communicated to the sides of the dryer. The sides being of sheet metal, will easily vibrate, and by nature of their structure will be noisy. Also, if the fan is out of balance, the shaft is likely to crystallize at the point where the vibration takes place. Ball bearings are especially desirable, as the obviate these difficulties. They are designed especially to be smooth running, and because of their freedom from wear, prevent vibration of the bearings.

The use of ball bearings for dryer fans is a preventive against the hazard of fire.

They also save over 33-3 per cent. of the total driving power,

reduce friction, especially on heavy broad canvas and duck weaves. Ball thrust bearings used at the friction clutch are fast superseding the old fibre washers which collect lint and dust and wear rapidly. A bad fitting crank shaft box is a source of lubrication trouble and damage to goods from oil stains. To remedy this successfully, ball bearings are used on crank shafts and cam shafts. One installation which was made nearly four years ago is still in operation without adjustment nor repair having been required, and the power tests have shown a saving of over 30 per cent.

One large loom builder demonstrated successfully the use of a belt on this machine one-half as wide as is used on regular plain bearing looms; therefore, on a large weave room equipment, the savings

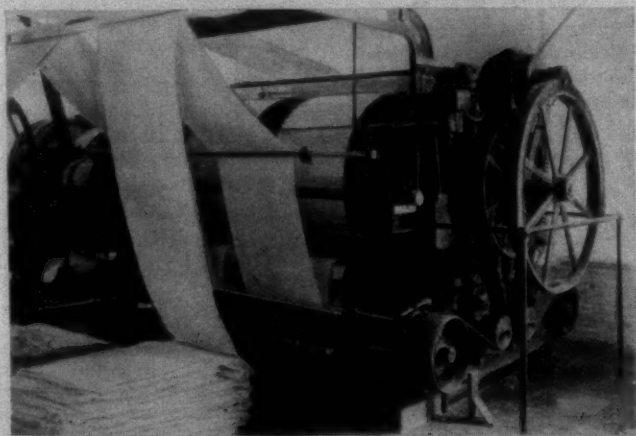


Figure 22.—A Ball Bearing Napper Machine, Motor Driven.

The severely tight belts used on these workers create a high bearing load, which feature favors the use of ball bearings.

On a 36 roll, 80-inch napper, 8-inch belts are used and 3 1/4 horse power is required to drive these rolls alone, and about 5 1/2 horse power when the complete napper is in operation. Formerly, with plain bearing worker rolls, over 8 horse power was consumed, thus showing a saving of approximately 30 per cent. in favor of ball bearings. It may be interesting to note that up to within a year ago 40,000 of these ball bearings were used annually on worker rolls on nappers throughout the world (this embraces both cotton and woolen nappers).

We quote from a letter from one manufacturer using these ball bearings on nappers, viz:

"We wish to express our high appreciation of the mechanical and theoretical design of these ball bearings. The loads carried by these machines are such as to make it absolutely necessary to have

operation are obviously important. In some types of dryers, the ball bearings are mounted in suitably designed pillow blocks which are securely bolted to the dryer frame. The construction is such that these pillow blocks and bearings can be applied to nearly all dryers now in use, in an exactly similar position to the old plain bearing pedestals which have heretofore been employed.

In other types of dryers, the fans are mounted upon hollow tubing which extends through the drying chamber and is supported with a bearing on each side of the machine, or they may be attached to a hollow tube running on ball bearings. Figure 26 shows this construction. The method of oiling where sight feed oil cups are used, necessitates little attention, and at one side of the machine only.

The circulating fan motors keep a large volume of heated air constantly in circulation. It is also essential that such a fan should run absolutely with no vibration, with

which means smaller motors and consequent reduction in initial investment and operating costs. Savings in maintenance costs are also effected by the use of these bearings, for the reason that they operate for long periods of time without renewal of the lubricant. Ball bearings require about one-fourth of the lubricant generally used in plain bearings.

There are numerous other efficient applications of these ball bearings to cotton mill machinery which would be of interest to the mill management.

Looms

On looms the take-up roll is very often mounted on ball bearings to

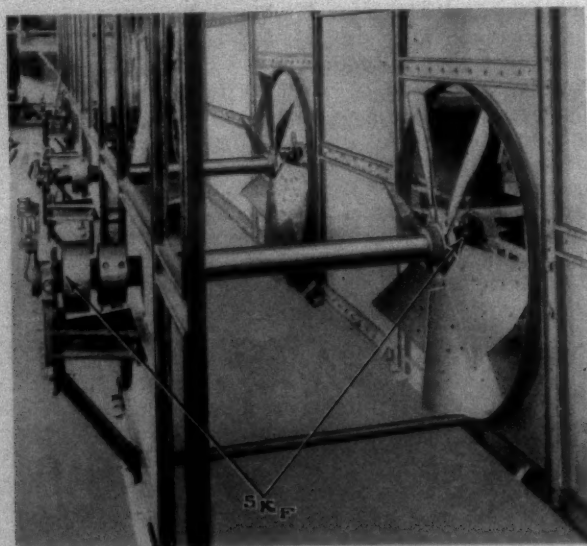


Figure 26.—Ball Bearing Air Circulating Fan For Drivers.

in belting and motive power will amount to a very considerable item.

On direct connected motor looms, these ball bearings have helped solve the starting difficulty by reducing the starting torque of the loom over 50 per cent.

Slashers.

The adoption of ball bearings on cylinder slashers is similar to their use on the large drying cylinders in the paper trade. To textile men the conditions to be found where cylinder slashers are equipped with trunnion bearings are well known. After the cylinder has been used for some time, the trunnions wear down, the journals become grooved and

(Continued on Page 5.)

What You Will See at the Textile Exposition

The following are sketches of some of the exhibits which will be installed at the Southern Textile Exposition at Greenville, S. C., Nov. 2nd to 6th, 1915. Descriptions of all exhibits will appear in our other issues during October.

Warren Webster & Company.

Warren Webster & Co., of Camden, N. J., will make a special feature in their exhibit in space 401 at Greenville of the Webster-Lea Heater-Meter. This will be exhibited in combination with the Yarnall-Waring Co., who are the manufacturers of the "Lea" V-Notch Recording Meter, while Warren Webster & Co., of course, manufacture the Webster Feed-water Heater.

They propose to have a Webster-Lea Heater-Meter of one of the small sizes at the exhibit of the various parts of the machine in so far as the passage of water through it is concerned.

In addition, they will exhibit some of the numerous Webster Specialties which enter into the installation of a complete Webster Heating System.

The American Pulley Company.

The American Pulley Company of Philadelphia, will have a complete and interesting exhibit in spaces 356 and 357 at the Southern Textile Exhibition, in which they will show, not only an assortment of different sizes of their standard "American" split steel belt pulleys, but also a number of special features descriptive of their product.

The exhibit of chief interest, perhaps, is what they call their "Efficiency Indicator," which is a little machine designed by them (patent applied for) capable of registering power consumed by a revolving pulley down to 1/3000 of a H. P. By the use of this machine, it is possible to determine what is the power consumed by pulleys, of the same size but of different make, as they revolve idle on a shaft. It is a fact, perhaps not often appreciated, that the type and design of a pulley is of extreme importance when considering the power factor in a mill. Some pulleys, having wide arms, fan air as they revolve, to an extent which means much power consumed and consequent loss of the coal pile. Other pulleys, properly designed, with thin arms which cut the air, show the last word in efficiency in this respect. The representative of The American Pulley Company will be able to show some surprising figures and will be glad to make demonstration on the machine in question.

There will also be shown some large pulleys and some pulleys of special character, particularly adapted for use in textile mills.

It may be said in conclusion that The American Pulley Company has just been awarded a gold medal at the Panama-Pacific International Exposition for their belt pulleys.

Burroughs Adding Machine Co.

The Burroughs Adding Machine Co. have taken two sections Nos. 319A and 319B for their exhibit at the Southern Textile Exhibition, and expect to feature perhaps only three of their 98 models at this meeting. These three machines are all especially adapted to cotton mill work and can be described briefly as follows:

First, the Calculating Machine, a very light, durable machine, used largely in cost keeping, invoicing and any other work requiring multiplication or division. This is a desk machine and while it is extra light is durable as any of their highest priced machine.

Second, their Duplex Machine, a machine containing two sets of adding wheels, used in invoicing, running four columns at one time as follows: bale number, pounds, pieces and yards, adding the pounds and yards and not adding the pieces and bale numbers. There are also a great many other uses to which this machine can be put, such as trial balances, and any work necessitating the use of three or four columns.

They will also demonstrate their Ledger Posting Machine with which it is possible to post direct to the ledger with the machine. This machine is a comparatively recent invention and is meeting with a success far in excess of expectations. Floyd Hughes, their Greenville, S. C., sales manager, will be in charge of the exhibit.

U. S. Gutta Percha Paint Co.

At space 234 the U. S. Gutta Percha Paint Co., of Providence, R. I., will show photographs of many Southern textile mills where Rice's Mill White has been used with satisfaction on ceilings and walls. One photograph will be of particular interest for it demonstrates the tremendous advantage in using a permanent glossy finish like Rice's Mill White as compared to cold water paint.

On this mill ceiling, the condition of the surface after the cold water paint has, as usual, flaked off, is shown to be blotchy and more of the paint has scaled than has adhered to the surface. It is shown how this sort of a condition can be remedied by "The Rice Method" and a tile-like, light reflecting, durable finish obtained.

They will display prominently a white painted barrel representing their trade-mark "Barreled Sunlight" and have panels to show at a glance the advantages of the sanitary and light reflecting finish of Rice's Mill White. J. S. Palmer, their Southern representative, will be in charge of the exhibit.

Mason Machine Works.

The Mason Machine Works, of Taunton, Mass., will exhibit and have in operation at Greenville, S. C., from November 2nd to 6th, 1915, a New Model Spinning Frame, fitted up with the latest ideas of equip-

ment necessary for the economical spinning of high grade yarns.

This spinning frame, although only of model size, shows the rigid construction of the head end, which contains all the gearing for both the twist gears and builder motion. A special feature of the Mason head end is the self-locking arrangement whereby the panels which allow of access to the gears cannot be opened while the belt is on the tight pulley and neither can the frame be started again until the panels have been replaced and the self-locking arrangement been replaced. After this has been done the belt can be shipped to the tight pulley. Freedom from accidents to operators is assured by these safeguards as it is impossible to get at the gearing while the frame is running.

The tin cylinders are made extra heavy and run in self-oiling boxes provided with brass bushings.

The spindles are the well-known Draper type of expanding clutch with flat whorls, using a flat braided band in connection with the popular method of driving four spindles with one band.

Special attention is called to the endless band method of driving spindles is worthy of careful examination.

The lever screws, saddles, cap bars and top rolls are all of a high grade of workmanship.

The motor with which the frame is driven is of a standard type of textile mill motor, loaned through the courtesy of the General Electric Company.

The loom exhibited is Mason Machine Works standard type of loom best adapted to receive the automatic filling supply, warp stop motion and filling feeler mechanism, built by and installed on the loom by the Hopedale Mfg. Co., of Milford, Mass.

The frame of the loom is of new design, accurately machined and assembled, provided with high take up roller, positively driven worm type of take up mechanism and an improved Bartlett let off motion.

The change pick gearing as arranged on this loom allows two picks in the cloth for each tooth in the change pick gear.

Attention is called to the lathe, sweep arms, laths swords and parallel motion, all designed to work in harmony with the automatic features.

Friction driving is standard on this loom and in this particular case the friction is driven with a standard loom motor furnished by the General Electric Company. Ordinarily with belt driving a friction pulley is supplied.

The automatic features operating on this loom are built by and attached to the loom by the Hopedale Mfg. Co., of Milford, Mass., an consists of a Filling Changing Mechanism, Warp Stop Motion, Thread Cutting Temples, and Feeler Mechanism.

The filling chamber has a full sized hopper or magazine with all

operating motions self contained. The shuttle feeler is mounted on the hopper plate, and is adjustable so as to compensate for any irregularity in the height of the loom lathe due to wear, and can be adjusted from time to time as occasion may require. A new method of operating the feed of the hopper ensures a bobbin being in place for transfer, even if there is but one bobbin in the hopper. Mistthreading device permits the least stoppage consistent with perfect quality cloth.

The Warp stop motion is very simple, and has very few parts for a mechanical warp stop. It is adjustable up and down, front or back, thus allowing of ease of adjustment and application. The feeder bar operates from a cam on the cam shaft, and an interruption of its full swing causes thee knock off mechanism to strike a clamp on the sword. The sword transfers the motion to the shipper lundle. The feeler bar is easily disconnected when starting up a new warp. The motion does not damage or twist the stop motion wires, and it will cause the loom to stop whether the wire is flat or has caught at right angles on one point.

The feeler mechanism shown, marks a real advance on other types. This feeder does not require special bobbins, shuttles, bunch builders on spinning frames, or complicated battery parts. The percentage of waste caused by previous feelers has been reduced to less than one per cent.

The thread breaking temple performs its work in a positive manner, without the use of cutters, knives, or other delicate pieces which are liable to come loose, or get out of order.

Dixie Seal & Stamp Company.

The Dixie Seal & Stamp Company will have space No. 365 at the Southern Textile Exposition, exhibiting stencils, Copper and Rubber stamps, Stencil inks, and the Ideal Stencil Machine.

Empire Manufacturing Company

The Empire Manufacturing Company of Goldsboro, N. C. expect to have an exhibit in space 312 A samples of their three ply veneer packing cases, three ply cloth boards and three ply circles which are used for shipping yarns on beams. The three ply packing case is made of three pieces of thin lumber usually 1-12" glued together with the grains running at right angles. This adds materially to the strength, in fact, this 1-4" three ply is fully as strong as 7-8" pine lumber.

The three ply veneer case is about 60 per cent as heavy as any other case of equal strength, and as the sides, ends, tops and bottoms are each made of one piece it makes a practically dirt and dust proof package.

This case is particularly well suited for the shipping of yarns.

(Continued on Page 9.)

How to Make High-Grade Ring Frame Knitting Yarns

Contributed to the Southern Textile Bulletin by a Superintendent.

Sizing and Weighing Sliver

The overseer should in my opinion weigh his drawing at least four times each day. This will give him an opportunity to keep track of any light or heavy laps that may get on the cards, and correct it to a certain extent before it gets all through the roving and machinery. Some overseers weigh six or more yards at one time which in my opinion is wrong, as they only get the average this way.

While if they were to weigh one yard from each delivery separately they could detect the variation locate the trouble if too great and remedy it as much as possible. The aim of the overseer should be to get his drawing as even and regular per yard as possible, as that is the only way he can hope to have even numbers at the spinning. The condition of the weather has some bearing on the weight of the sliver but not very much. Any overseer can make himself familiar with the amount of moisture in the work by weighing convenient size, say six yards of sliver fresh from the machine on a wet, sticky day. Hang this up in the office or some place, and let it stay there until some dry day, and reweigh it, which will of course weigh a little lighter.

Also take the same amount fresh from the machines on a dry day, weigh it and hang it up, and on a wet day reweigh it. He will find that it will gain slightly in weight. He can then govern himself in making allowance for moisture.

The Drawing Tender

The drawing tender should be an active reliable person, one that take pride in keeping his machines clean and well oiled, and one that will not make singlings and doublings, as what is done wrong at this process of the mill can never be got right. I consider the drawing the most important process in the mill, and the overseer should not trust it to anybody but a well trained, reliable person. The piecings both in putting up ends at the front and back should be done with great care as a singling or doubling at the drawing multiplies in length a good many times before it gets through the spinning, and of necessity will effect the size and weight of the yarn. Also the twist. The drawing tender should keep clean hands, as unless he does he will invariably soil the sliver every time he pieces up a breakage in the sliver. Soiled piecings at the drawings seem to disappear during the slubbing, roving and spinning process, but it is on the cotton nevertheless, and may cause irregular bleaching in the knit goods. The overseer will do well to get acquainted with his drawing tender, and watch the way he does things and he will see where he can make considerable improvements in the quality of his drawing.

Irregular or Cut Drawing

If not caused by trumpets being to open it may sometimes be traced to bad rolls, or badly worn sad-

dles. Lack of sufficient oiling at regular intervals. Roll weights not set so as to give the maximum pressure.

With leather rolls some times and drawing may be traced to poor roll fresh varnishing. With metallic rolls a lump of trash or foreign matter such as gum straw grits, etc., some times gets in the flutes and does a lot of bad work for several days before being located, unless a smart diligent operative is in charge. Too much draft between the front rolls and calender rolls will damage the sliver also, and this can be detected by pressing the sliver between the trumpet and front roll while the frame is stopped until it bags considerably then start the frame up,

and if the slack picks up quickly it is evident that the draft is too great, and should be reduced until the sliver shows a slight tendency to run slack. Damaged sliver can also be traced to nilling the cans too full as after the pressure reaches a certain stage on an overfilling can the friction will invariably damage the sliver. To keep the cans behind the drawing conveniently arranged will be beneficial to the sliver as some times it stretches between the can and back roll if it is crossed up or has to pull too far.

The Drafts

Excessive drafts between any of the rolls will cause uneven drawing and great care should be taken not to get the total drafts too great.

I recommend not going over 6.00. Also where there are a large number of machines under one section man he is liable to have a shortage in change gears sometimes and to save trouble and time will substitute a different gear from what is needed on one or more machines which will cause the numbers to vary considerably, and sometimes leads to a very serious complaint.

The Speed

Drawing frames that are run too fast will fall considerably short in producing first class sliver. No matter how good the operative is, if the frames run too fast we will be sure to get bad work, as the rolls will jump and quiver, and cause the

(Continued on Page 8.)

Textile Power Requirements

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Ball Bearings For Cotton Mills.

(Continued from Page 3).

sometimes the cylinder ceases to revolve. The tension on the warp is naturally increased, and the slasher tenders must be particularly careful to start the slashers slowly which cuts down the production of the machine.

The use of ball bearings is highly advised for slasher cylinders, and the users of the same testify to their durability and entire satisfaction. The machine equipped with these bearings is easily started from rest and the tension of the warp is decidedly deduced; thus a saving in power and increased production make adoption of ball bearings profitable.

Tests indicate that to start the cylinder from rest where the slasher cylinder is equipped with trunnion bearings requires from 7 1-2 to 20 pounds, depending upon the condition of the bearings. When the

sub-basements and other out-of-the-way places where it is inconvenient to oil or inspect them, they are very easily overlooked. For this reason ball bearings, which require attention but three or four times a year, are particularly useful on this type of equipment.

Plain bearings suffer from neglect. They must be carefully oiled and watched, as inattention is likely to prove disastrous. Lack of oil and continuous running at high speed under heavy load frequently cause overheating with subsequent seizing of the bearing. Fires often have their origin in overheated bearings.

A well known jute mill found the substitution of ball bearings for the plain babbitt type a complete remedy for their fan troubles. They use a 48-inch exhaustor to operate a waste removal system which transports jute through a large duct line. The fan is situated on a platform near the ceiling of a dusty, lint cov-

In addition to removing all operating troubles and reducing the fire hazard, the use of ball bearings undoubtedly lowers to a very large extent the power wasted in friction."

Electric Motors.

The use of ball bearing for electric motors is proving to be an ever growing application for the reason that the requirements in textile mills are such that ball bearings seem especially adapted for this service. There is always danger from fire in textile mills where there is frequently an accumulation of oil-soaked lint around a leaky bearing, and added to this a possibility of ruining fabrics from dripping oil. In the individual ceiling motor drive or the four frame drive where direct connected motors are employed, the possibilities of dripping oil are a constant menace unless the bearings can be sealed against leakage. The ball bearing are contained in compact housings which are sealed on either side by close fitting bearing caps. These caps form liberal lubricant chambers around the ball bearings. The bearings are positive

self lubricators without any auxiliary oiling devices, and the close fittings caps next to the shaft insure the retention of the lubricant and therefore the prevention of oil leakage along the shaft.

Further than this, the elimination of wearing parts in the motor, the freedom from rotating oil rings or chains in the bearing heads and the compactness of the bearing head construction due to the short length of the bearings along the shafts (see Figure 34) secure for the motor user a construction which is as simple as it is rugged and as thoroughly proof against abuse as any type of design yet devised.

Hangers.

The power consumed by line shaft in cotton mills usually amounts to such a large percentage of the total power used, that it is well to consider briefly the advantages of ball bearings in shaft hangers, post hangers and pillow blocks.

In March, 1914, a paper presented before the American Society of Mechanical Engineers showed by comparative tests the following relative

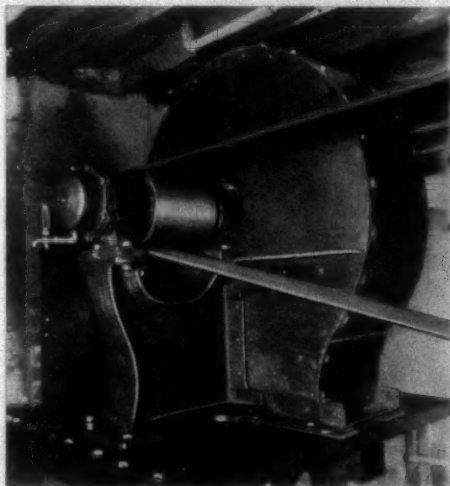


Figure 29.—Exhaust Fan Installed in Jute Mill.
(Note the Ball Bearing Box.)

cylinders are mounted on ball bearings which are protected from the intrusion of water and dirt, this starting effort is reduced to 4 to 7 pounds; a very decided saving.

The fact that rolling substitutes rubbing friction in the bearings minimizes the friction and insures long life to bearings.

Scutchers.

Another application of modern ball bearings is in scutchers and cloth expanders of the finishing department. The features of light running, cleanliness, freedom from attention, and power saving, warrant this adoption. One manufacturer writes, viz:

"We have scutchers working, driven by 2 horse power motors, and before the ball bearings were installed the consumers figured a 4 horse power demand under the same conditions."

Fans.

A recent article entitled "Fan Trouble Solved by Ball Bearings" is well worth quoting since fans, blowers and exhausters are in prominent use in cotton mills.

"Because of the extraordinary nature of the service demanded of them, fans and blowers are subject to operating conditions seldom imposed on any other type of machinery. Often located near ceilings, in

erect loft.

The plain bearings gave no end of trouble.

They were continually overheated, frequently becoming so hot that the babbitt melted and ran out. This, of course, crippled the system.

The installation of self aligning ball bearings boxes in place of the plain bearings occasioned but slight inconvenience. Now the fan runs continuously ten hours daily at 1,950 revolutions per minute, requiring no other attention than an oiling about every three months. A light grade of engine oil is used, a gauge glass showing the amount of oil in the bearing.

The accompanying illustrations show the method of installation. The driving pulley is located between the two bearings, the impeller being overhung. The thrust bearing which is required to take up the end thrust of the fan, is provided in the box furthest from the fan casing. The boxes are provided with felt packing rings which protect the bearings from dirt and line and allow a lubricant to be washed by leakage. Oil-soaked heaps of dust are therefore eliminated from around the fan.

Due to the self-aligning feature of the ball bearings the weight of the overhung fan does not bind the bearing, a condition which is apt to occur with plain bearings.

THE SEYDEL MFG. COMPANY

JERSEY CITY, N. J.



Sizings and Finishings

Soaps and Softeners

FOR ALL TEXTILES.

All Silent Chains Look Alike

Without inspecting the details of construction it is hard to tell the different makes apart.

There is none, however, possessing the Liner Joint of

Link-Belt Silent Chain



THE SUCCESS of the Link-Belt Silent Chain is due almost entirely to the superiority of its joint construction. The segmental liners or bushings, which are removable, extend across the entire width of the chain, thus doubling the bearing surface and halving the bearing pressure on the joint. The bushings (or liners) are case-hardened, and bear upon the case-hardened pin. The latter is free to, and does rotate with reference to the bushings and presents every particle of its surface for wear. As a result it wears uniformly, keeps round, and the chain maintains to the end its high initial efficiency, (98 2 per cent. on actual test).

Write for Link-Belt Silent Chain Data Book No. 125.

LINK-BELT COMPANY

PHILADELPHIA CHICAGO INDIANAPOLIS

New York.....299 Broadway Buffalo.....698 Ellicott Square
Boston.....49 Federal Street Detroit.....911 Dime Bank Bldg.
Pittsburgh.....1501-3 Park Bldg. Cleveland.....Rockefeller Bldg.
St. Louis, Cen. Nat'l Bank Bldg. Birmingham.....General Mach Co.
Montreal, Can.....John Millen & Sons, Ltd.

amounts of power consumed in friction in three types of hangers. This table shows the relative

It is a well known fact that many English cotton mills use complete equipments of ball bearing hangers,

Ball Bearing Hanger,
Roller Bearing Hanger,
Babbitt Bearing Hanger

100 Feet per minute.		300 Feet per minute	
77 Deg.	100 Deg.	77 Deg.	100 Deg.
1	1	1	1
2.2	2.5	2.7	3
3	3.6	4.5	4

amounts of power consumed in friction by the three kinds of bearings at the speeds and temperatures in- and the number of New England cotton mills following this example is increasing. Because of the lubri-

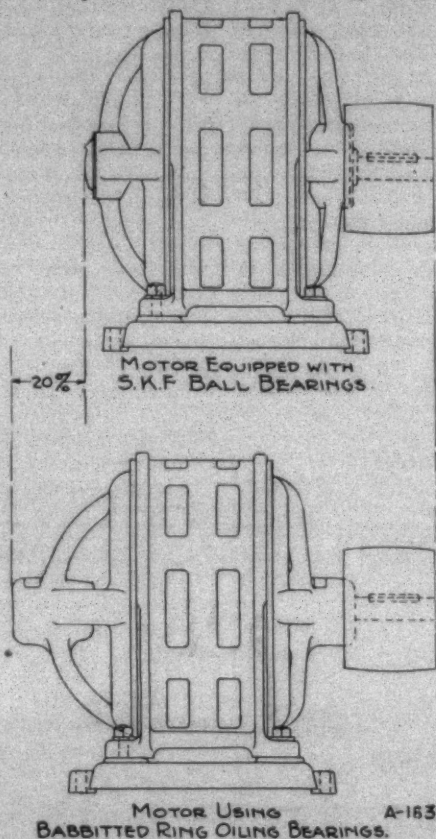


Figure 34.—Comparison of Motor Lengths.

icated; the relatively numbers are based in each case on the average power for three loads, 710, 1,210 and 1,740 lbs. for balls; 740, 1,240 and 1,740 for roller; 730, 1,230 and 1,730 for babbitt.

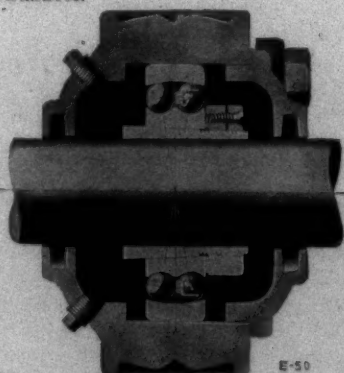


Figure 36.—Sectional View of Hanger Box Mounted on Shaft.

cant saving, cleanliness and reduced fire hazard, they commend themselves to the mill superintendent. The ball bearing for these hangers is readily understood by referring to Figure 36. An adapter bearing is used to grip the bearing securely to the shaft and it should be noted that no rotating bearing parts touch the shaft. The casing surrounding the bearing has but one removal cover with plugs on top and bottom for refilling and draining of the large lubricant chamber. Provision against leakage of the lubricant and intrusion of dirt is effected by a groove and felt washer in each side of the bearing.

Ball bearing hangers are more than power savers. They are power producers and a most effectual means of reducing equipment costs. They save in power, maintenance, lubrication and equipment.



Figure 37.—Typical Installation of Ball Bearing Hangers.

A bolt weighing one-half pound, placed on the end of a 30-inch pulley is sufficient to start the entire 140 feet of shafting rotating.

LESS SECONDS

ARAGON COTTON MILLS

ROCK HILL, S. C., April 16, 1915.

STEEL HEDDLE MFG. CO.,

Philadelphia, Pa.,

Dear Sirs:

We have had one-fourth of our mill equipped with your FLAT STEEL HEDDLES for nearly one year. We get just as many yards of 80x80 PRINT CLOTH from the steel heddles as we do from the twine harness, and MAKE FEWER YARDS OF SECONDS. I consider it the best harness we can buy. We have just placed the order for the full 560 sets.

Yours truly,

P. B. PARKS, Superintendent.

If you are interested in making cloth of BETTER QUALITY, BETTER PRODUCTION, and at LESS COST for loom-harness supplies, we have some facts that will interest you.

We are specialists in loom harness, including steel drop wires, plain or nickel-plated.

STEEL HEDDLE MFG. CO.

2100-20 West Allegheny Avenue

PHILADELPHIA, PA.

SOUTHERN AGENT

HAMPTON SMITH, GREENVILLE, S. C.

Starch

Do you realize the importance of GOOD SIZING? We have made a scientific study of the requirements of the textile industry and manufacture SPECIAL STARCHES adapted to every requirement of the industry.

Corn Products Refining Co.,

New York City

SOUTHERN OFFICE

Greenville, South Carolina.

Starch

Manufacture of High Grade Ring Frame Knitting Yarns.

(Continued from Page 5.)

ends to break more often. Drawing frames that are to produce sliver for high grade yarns of medium count should not in my opinion have a front roll speed of over 300 revolutions per minute, and the sliver should not weigh over 50 to 60 grains per yard.

The Slubbing and Roving Frames.

Presuming that we get good sliver from the drawing frames, we must not spoil it on the slubbing and roving frames. What suggestions I have to offer at the slubber apply also at the intermediates and roving frames except the sliver. All the cans should be creeled at the slubber at once and while the slubber is stopped to doff. This makes all the piecings and heavy connections come on the empty bobbin and will be pulled off by the intermediate hand when the creels his machine. This will avoid getting it in the work and spoling the roving with hard ends and heavy places. I recommend having a draft between 3.25 and 4.00 as I have made considerable inquiries and have tried several kinds of drafts and that seems to be the most popular. The rolls should have the proper weighting on them, as if the sliver is too heavy for the weight on the roll, heavy places will sure make their appearance, in the roving.

The Twist.

Too much twist in the roving will cause it to draw hard, and will make it uneven, and if good cotton is used I recommend for the slubbers 1.10 times the square root of the hank for from 30/100 to 45/100 H. R. This gives sufficient twist to pull off a 12x6 bobbin without any stretch and there will be very few if any hard ends in damp weather, from that cause. For the intermediate roving I recommend 1.20 x the square root, and on the roving frames I recommend 1.30 times the square root of the hank, if the roving is 4.00 hank or finer, as finished fine roving will stretch if it hasn't sufficient twist per inch. The draft for the intermediates should be 4.00 to 4.90 and on fine roving frames 5.00 to 6.00 is the most popular, of course that depends on the equipment, as to the lowest draft that can be used. To make first class yarns we must have good clean even roving, and we can only get that by having our roving machinery in good order, and requiring the

operative to do his work right. To make good roving requires the proper lay, the proper tension, the right twist per inch, and careful handling; also the roving must be free from doublings and singlings and stains, and hard ends.

The Oiling.

No machinery will do good work and run easily without proper lubrication, but the oiling, especially the rolls should be done with care, and just enough to do the work is all that ought to be used as too much will get on to the roving and soil it. If the roving frame operative does the oiling he should be required to wash his hands after each oiling which is necessary if we don't expect to get oil on the roving. The same rule should apply to the cleaning also, as the hands get soiled while cleaning, and if the operative pieces a broken end with dirty oily hands the roving will be soiled also. The oiling of the bolsters should be done with great care and the surplus oil wiped off, for unless it is it will get on the bobbin gears and finally on the bottom of the bobbins, where it will soil nearly all the roving when it is doffed off and thrown into the box. It is very important that the bottom of the bobbins is kept free from black oil, and dirty lint. Too much oil on the roll will soon get the top clearers saturated with black oil, which will also get on the roving.

Crayon.

In rooms where there are several kinds of roving, and crayon has to be used to distinguish the different kinds, it should be used carefully as some colors of crayon show up in the yarn and make it appear as if it was oil stains. Crayon will some times keep the goods from bleaching where it is too heavy.

Stretched Roving.

The most common cause for stretched roving is the tension on any of the roving machinery, and is more pronounced on the first few layers after each doffing. This is caused by not having the proper bottom cone gear, as the surface speed of the bobbins is greater than that of the front roll, and the result is that the roving is stretched, if the difference is too great. If the lay gear, cone gear, and tension gear is correctly proportioned, and the bobbins are of uniform size, a roving frame will run a full doff, with scarcely no breakages, if all other conditions are right, and by all means don't allow the operative

to be taking up or letting off the tension, as it will be sure to make bad running spinning, with variations in the numbers. A goodly supply of tension gears should be kept on hand at all times so as to meet the different changes of the weather, and if the ends get too tight or too loose the tension gear should be changed.

Cleaning.

On the roving frames the top clearers should be picked off every time the frame doffs. This keeps the clearer waste from getting in the roving, and causing dirty, specky roving. All loose lint where it is liable to fly on the ends and twist, should be kept off the machine, the flyers when dirty will get lint on the roving and make dirty, heavy portions that won't draw out properly, and makes dirty, ugly places in the yarn that some times get through the winder guides and on the cones. The steel rolls should be kept free of oily lint also, as it will keep the top rolls soiled, and also the roving.

The Speed.

A roving frame, like all other machinery, will not run as well when speeded too high as it will if in the bounds of reason, and I recommend staying a little under the speed recommended by the machine builders. I have always been able to get better work and as much of it by staying on the safe side, besides the machine will require less oil supplies.

Hard Ends.

Hard ends on the bobbins are caused mostly by the operatives using dirty hands, and twisting the roving too hard when they piece up an end, and any trouble that the overseer goes to in order to stop it will be time well spent, as hard ends are uncalled for, and do the rolls and yarn also considerable damage.

Sizing the Roving.

If the drawing sliver is weighed four times each day and kept right, the roving frames will hardly ever have to be changed, and one time each day, preferably afternoon, early in the evening, will be sufficient to keep the roving right. In order to keep track on my roving I size from different machines each time until I get around, this gives me an opportunity of locating any difference if too great, which is some times caused by getting the wrong draft gear on some certain machine.

It will be timely to say that a good many little things make a few large ones, and every small defect that can be removed from the product that is to go into high-grade yarn will be that far toward producing it, and the only right way is to keep it right throughout the process. It is surprising that we get as good results some times as we do, if we watch the carelessness that is tolerated from the lapper room to the shipping cases.

The Spinning.

To spin high-grade yarns on ring frames requires double roving, and the draft of the frame should not exceed 10.00. Yarns that are spun from double roving are evenner and carries more breaking strength per strand than those from single roving. Yarns that are classed high-grade by the knitters does not contain as much twist as the ordinary run of yarns which has to have it on account of the defects.

Hard, wiry yarn does not make as nice finished garments as the soft yarn, and it is very important not to get it too hard. About 3 times the square root of the number is the proper amount of twist to put in.

The Rolls.

Unless the rolls are in good condition and kept well cleaned and oiled we may not hope to get good results at the spinning no matter how good the roving may be. An old, badly grooved roll or a poorly covered roll will make poor yarn, the same is true of rolls that are dirty and need oil. The overseer should keep a close watch on the roll covering and also the cleaning and proper oiling of the rolls. The rolls should be cleaned every day, and the front rolls oiled once each day and the back and middle rolls twice each week will be sufficient. A good, heavy oil should be used, preferably one that will not stain the yarn. The oiling should be done by a careful person and just enough to lubricate is all that should be put on as the surplus will be sure to get on the yarn and stain it, especially if it runs from the roll necks.

The Spindles.

The spindles should be oiled often enough to keep them running free in the bolsters, and if a spindle is wobbling no matter what the cause the trouble ought to be located, and remedied at once, as a wobbling spindle will make poor yarn. A

(Continued on Page 15)

Ashworth Brothers, Inc.

Tempered and Side Ground Card Clothing

Tops Reclothed.

Lickerins Rewound.

Cotton Mill Machinery Repaired

12 to 18 West Fourth St., Charlotte, N. C.

240 River Street, Greenville, S. C.

127 Central Avenue, Atlanta, Ga.

DISCUSSIONS BY PRACTICAL MEN

Announcement of Contest.

During the month of December, 1915, we will run a contest for the best practical articles on "Cause and Prevention of Uneven Yarn."

For the best article on this subject we will pay \$10.00. For the second best article we will pay \$5.00.

Seven men of practical mill experience will act as judges of this contest and will decide to whom the prizes will be paid. The names of the judges will be published after they have made their decision.

This is an extremely important subject and one upon which many men have different ideas. It is an intensely practical subject and a contest in which the practical man of long experience will have a great advantage.

We want the practical ideas of practical men and hope that no one will remain out of this contest because he can not write or spell well. We will correct such errors and send the article back to the writer to examine before it is printed.

The rules which will govern the contest will be published in full next week.

Editor:

Having read the discussion between "Spindle" and "W. R. A." I wish to ask "Spindle" to give me his rule for figuring the percentage of humidity. Suppose the hygrometer is registering 84 on the wet bulb and 85 on the dry bulb, then what is the per cent of humidity. Any information from "Spindle" or any one who can give a correct rule for figuring per cent of humidity will be appreciated.

Inquirer.

Cotton Factories in Hungary Must Close.

A government decree ordering all factories in Hungary engaged in the manufacture of cotton goods to cease work and surrender their stocks for military purposes has thrown 100,000 persons out of work in Bohemia alone and at least as many more in other parts of the empire.

Jute Wins Over Cotton in Postoffice Department.

Washington.—Jute instead of cotton twine will be used by the Postoffice Department during the year beginning November 1, for tying letters. The contract for furnishing jute has been awarded the Ludlow Manufacturing Association of Boston, Mass., at \$0.099 a pound deemed to be the lowest bid for furnishing either jute or cotton submitted

to the Department. Cotton is being used this year at \$0.1323.

The cotton twine bidders were: Beaumont Manufacturing Company, Spartanburg, S. C., at \$0.1687; Glencoe Cotton Mills, Columbia, S. C., at \$0.165 and the Lancaster Cotton Mills, Lancaster, S. C., at \$0.15875. Subsequent to the opening of the bids the Lancaster Mills was permitted upon its request to withdraw its bid.

During the year 2,500,000 pounds of jute twine will be used by the Department. Cotton now is being used. The jute contract amounts to \$247,000.

Cabarrus Mill Awards Prizes to Winners.

The Cabarrus Mill, Kannapolis, N. C., awarded the prizes for best yard and gardens. The mill is a new one and the houses are all new, and it is also true that the garden spots are new and most of them were in gardens for their first time, but the people made them yield like old gardens. The only trouble the judges had was deciding who should have the prizes.

The first prize for best yard went to J. W. Doan, house No. 31. While Mr. Doan gets sixth prize on gardens, the two prizes netting him \$15, \$10 coming for yard and \$5.00 for garden.

The first prize of \$10.00 for garden goes to H. S. Burris of No. 53. Second prize of \$7.00 goes to Mr. Hunt of No. 40.

Third prize of \$7.00 to Mrs. Mary Lamb of No. 52.

Fourth prize of \$5.00 to F. L. Bostie, No. 71.

Fifth prize of \$5.00 to D. F. Styers of No. 51.

Sixth prize of \$6.00 to J. W. Doan of No. 31.

Seventh prize of \$2.00 to H. D. McCranney of No. 76.

Eighth prize of \$2.00 to Jim Cline of No. 13.

Ninth prize of \$2.00 to J. W. Hare of No. 24.

Tenth prize of \$2.00 to T. H. Cook of No. 35.

Judson Mill

Greenville, S. C.

W. C. Bobo.....Superintendent
L. A. Parker.....Carder
J. M. Parker.....Spinner
I. T. Tidwell.....Weaver
G. W. Painter.....Designer
J. E. Holkins.....Master Mechanic

Royal Bay Co.

Charleston, S. C.

R. A. Burris.....Superintendent
D. A. Poplin.....Carder
Jno. Price.....Spinner
C. W. Bailey.....Weaver
D. E. C. Clough.....Cloth Room
Henry Schoats.....Master Mechanic

What You Will See at the Exhibition.

(Continued from Page 4.)

ed for shipping cotton and woolen goods of all descriptions, cotton yarns, hosiery and underwear. It has been in existence about ten years and is practically every instance where it has been used it has proven its value.

This case is being used by such representative manufacturers as Riverside & Dan River Cotton Mills, Danville, Va.; Amoskeag Mfg. Co., Manchester, N. H.; Windsor Print Works, North Adams, Mass.; Revolution Cotton Mills, Greensboro, N. C.; Aurora Cotton Mills, Burlington, N. C.; Springstein Mills, Chester, S. C.; Fort Mill Mfg. Co., Fort Mill, S. C.; Toler, Hart & Holt, Fayetteville, N. C.; Rocky Mount Mills, Rocky Mount, N. C.; Lumberton Cotton Mills, Lumberton, N. C.; Durham Hosiery Mills, Durham, N. C.; Interwoven Hosiery Mills, Martinsburg, W. Va.; Hanes Underwear Co.; Mayo Mills, Mayodan, N. C., and numerous others.

The three ply circles fit over the end of the beams and are then covered with burlap. This keeps the yarns off the floor of the car and carries them to destination in much better shape. These circles are being used by W. S. Gray Cotton Mills, Woodruff, S. C.; Duncan Mills, and Judson Mills, Greenville, S. C.

The three ply cloth board is claimed by them to be very much stronger than any other board on the market and the weight is slightly less than the average cloth board.

They have been making this material for about six years and at the present time have a capacity of 60,000 feet per day.

The Searchlight Company

It is the intention of the Searchlight Company of 1016 Karpen Bldg.

Chicago, Ill. to exploit specifically Searchlight Welding and Cutting apparatus. They have arranged for space 366 and 367 at this exposition and at that time will have complete lines of their apparatus exhibited and will also have expert demonstrators showing the manner in which Searchlight apparatus may be used for welding and cutting metals of various kinds.

They will have in attendance at this exposition the Atlanta manager, also one or two salesmen, and an expert demonstrator, all of whom are thoroughly familiar with the art, and expect the exhibit will arouse a considerable degree of interest.

The Mossberg Wrench Company.

The Mossberg Wrench Company of Central Falls, R. I. will occupy spaces No. 315 and 316, exhibiting a loom equipped with the K-A Electrical Warp Stop, and also the line of Sim-Pull and Sim-Plex Countershafts and Belt Shifters. With these will probably a line drop wires and samples of other metal goods such as they manufacture, both as staples and on special order.

The K-A Electrical Warp Stop for looms is well known in New England cotton mills, and also in worsted and woolen mills throughout the Eastern section. Of its simplicity and adequacy nothing can be gainsaid.

The Sim-Pull and Sim-Plex Countershafts and Belt Shifters are recognized Safety Devices, having received a Gold Medal Award at the Exposition for Safety and Sanitation in New York City last winter, and being listed as such with several State and Insurance inspection departments.

Names Wanted.

We wish to get a more complete list of the superintendents and overseers. Please clip out this blank and mail it to us with the names at your mill.

Name of Mill
Town
Number of spindles.....
(Give exact number).
Number of looms.....
(Give exact number).
..... Superintendent
.....Overseer of Carding
.....Overseer of Spinning
.....Overseer Weaving
.....Overseer of Cloth Room
.....Master Mechanic

SOUTHERN TEXTILE BULLETIN

Offices: Room 912 Realty Building, Charlotte, N. C.

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D. H. HILL, Jr., Associate Editor

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Contributions on subjects pertaining to cotton, its manufacture and distribution are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

ADVERTISING.

Advertising rates furnished upon application.

Address all communications and make all drafts, checks and money orders payable to the Clark Publishing Company, Charlotte, N. C.

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THURSDAY, OCTOBER 7, 1915.

Sketches of Exhibits.

In our four October issues we expect to publish advance notices of all the exhibits which will appear in the Southern Textile Exhibit at Greenville, S. C. November 2nd to 6th.

We are publishing these notices without any cost to the exhibitors as we wish all of them to obtain full benefits from the Exhibition and we know that these will be widely read and will tend, not only to raise the attendance but also to increase the interest of those that attend.

The first of these notices are being published in this issue and we suggest to those who expect to be present in Greenville that they make note of features which interest them in order that they may investigate such points carefully at the Exhibition. Every mill man expects to learn much from the exhibitions and with that end in view it would be a good idea to write in advance to each exhibitor for a catalogue of his devices and products. The home address of the exhibitors is given with each sketch and they will be glad to send catalogues and literature. Mention in writing that you saw the sketch in the Southern Textile Bulletin.

Advances in Prices.

The month of September showed the greatest advance in the price of cotton goods of any month in recent years. We have heard some claims to the effect that the advance in the price of goods was less than that of cotton, but the following table giving the figures for all the leading lines of gray goods indicate that the average advance was equal to that of the staple.

	Price Sept. 1	Price Oct. 1	Adv. per yd.	Adv. per lb.
64x60, 27-inch... 7.60 yds.	2%	3%	%	2.85c
56x52, 27-inch... 9.00 yds.	2%	2%	%	3.38c
60x48, 38 1/2-inch... 6.25 yds.	3%	4	%	3.90c
64x60, 38 1/2-inch... 5.35 yds.	3%	4%	%	3.35c
68x72, 39-inch... 4.75 yds.	4%	5%	%	3.00c
72x76, 39-inch... 4.25 yds.	5%	5%	%	2.65c
80x80, 39-inch... 4.00 yds.	5%	6%	%	3.00c
80x88, 39-inch... 5.00 yds.	6%	6%	%	1.86c
48x48, 36-inch... 4.00 yds.	4%	5	%	2.50c
48x48, 31-inch... 5.00 yds.	3%	4%	%	2.50c
48x40, 36-inch... 5.50 yds.	3%	3%	%	2.00c
76x72, 40-inch... 9.00 yds.	5%	6	%	2.25c

88x80, 40-inch... 8.50 yds.	6%	7	3/4	2.13c
96x100, 40-inch... 7.00 yds.	8%	8%	1/2	3.50c
88x80, 30-inch... 11.35 yds.	5%	5%	3/4	1.43c

The figures refer entirely to gray goods whereas the advance in colored goods was in most cases considerably greater.

The pessimists and calamity howlers always see the advance in cotton without ever admitting that there has been a proportional advance in the price of goods but the very fact that practically all mills are now busy and many are operating their looms night and day, indicates that the cotton manufacturing business is on a fairly profitable basis.

The strength of the cotton goods situation is shown by the fact that prices responded so promptly to the advance in cotton.

The Passing of Major Schenck.

The death of Major H. F. Schenck, president of the Cleveland Mill & Power Co., Lawndale, N. C., removed one of the pioneers and most prominent figures in the cotton manufacturing industry of the South.

His grandfather, Michael Schenck, built in Lincoln county, the first cotton mill in North Carolina. His father, Henry Schenck, was a farmer and, later in life, a cotton manufacturer.

The Major was born on November 29, 1935.

Reared near his present home in Lawndale. He secured his education at Cokesbury Academy and was soon elected a colonel of the state militia. When the Civil War broke out, he organized Co. F, 56th Regiment and, as its captain, served the Confederacy. He was promoted to the rank of Major for his bravery and leadership on the field of battle. His health failing, he was ordered home by the army physicians. He regained his health and built at Cleveland Mills the first cotton mill in Cleveland county. It was a frame structure and the products were hauled to Lincolnton, the railroad terminus at that time.

In 1888, the mill at Lawndale was built, the major having secured a partner, Maj. J. E. Reynolds of New York.

In the nineties, without the assistance of a bond issue or outside capital they built the Lawndale railroad, which has done so much for the development of Upper Cleveland.

In 1887 he served the State Legislature, with honor and distinction to himself and county. In politics, he was a Democrat, but believed in moderate protection.

Maj. Schenck was the oldest Mason in point of membership in the county, having joined Cleveland Lodge No. 202 in 1856. He was master of this lodge and also of the Lawndale Lodge for several terms.

To the President of the United States and to the Committee on Finance of the Senate, and the Committee on Ways and Means of the House of Representatives:

The National Association of Cotton Manufacturers respectfully call's to your attention the following facts in reference to the increased importations of cotton cloths and of manufacturers of wool during the months preceeding the outbreak of the European War.

Imports of Cotton Cloths under the Underwood-Simmons Tariff for the Nine Months Before the War Began Compared with Imports for the Corresponding Months Under the Paine-Aldrich Law:

Underwood-Simmons Law.

November, 1913	\$1,016,019
December, 1913	1,737,412
January, 1914	1,682,785
February, 1914	1,454,439
March, 1914	1,402,071
April, 1914	1,003,548
May, 1914	749,032
June, 1914	753,205
July, 1914	571,650

Total

Paine-Aldrich Law.

November, 1912	\$ 598,148
December, 1912	992,331
January, 1913	958,097
February, 1913	727,121
March, 1913	721,902
April, 1913	690,083
May, 1913	532,028
June, 1913	492,262
July, 1913	464,482

Total

Imports of Manufactures of Wool for Six Months Ending June 30th:

1912, \$6,754,771, Payne-Aldrich Law.
1913, \$7,227,199, Payne-Aldrich Law.
1914, \$24,173,980, Underwood-Summons Law.

It is evident from these figures that the reduced duties of the Underwood-Simmons law brought about an immediate and noticeable increase in the importations of cotton cloths and of the manufactures of wool.

In some instances the imports of cotton cloths increased 100 per cent. and for the total period of nine months there was an increase of 68 per cent. In the case of the manufacturers of wool the increase was even greater, the imports for six months of 1914 being nearly four times as large as the imports during the same period of 1912.

Our cotton and woolen mills are capable of supplying, at reasonable prices, the entire needs of the American market. Any such increase in the importation of staple textiles, as occurred before the outbreak of the war, must result in the curtailment of American production and in distress to the wage earners of our textile mills.

When the war closes, the American market will be eagerly sought by the European nations as the most available and promising means of restoring their shattered industries and recovering their commercial prestige. The world's gold is pouring into our coffers, and Europe will seek to replenish its de-

(Continued on Page 16).

PERSONAL NEWS

A. Wright is now assistant second hand in spinning at the Buffalo (S. C.) Mill.

M. T. Boovey has resigned as No. 2 spinner at the Jackson Fibre Co., Bemis, Tenn.

M. B. Leslie is now overseer of weaving at the Maplecroft Mills, Liberty, S. C.

Otis Wylie of Lockhart, S. C., is now erecting looms for the Draper Company at Langley, S. C.

John Easler has accepted a position as section man in the card room of the Buffalo (S. C.) Mill.

A. B. Carter secretary of the Southern Textile Association paid us a visit last Saturday.

T. G. Moser has become overseer of weaving at the Fort Mill (S. C.) Mfg. Co. No. 2.

J. A. Wooten has resigned as overseer of weaving at the Fort Mill (S. C.) Mfg. Co. No. 2.

J. T. Bowers is now fixing looms at night at the Kershaw (S. C.) Cotton Mills.

P. E. Lackey of Kershaw, S. C. has become loom fixer at the Lancaster (S. C.) Cotton Mills.

Luther Kellem is now second hand in No. 4 spinning at the Dan River Mills, Schoolfield, Va.

J. L. Padgett overseer of carding at the Buffalo (S. C.) Mills has been quite ill but is reported to be improving.

A. L. Wilmon of Ann, Ohio, has returned to Charlotte, N. C. and accepted a position with the Westinghouse Electric Mfg. Co.

William Miller, of Camden, S. C., has accepted the position of overseer spinning at the Hanes Knitting Mills, Winston-Salem, N. C.

J. B. Holt, of Schoolfield, Va., is now overseer of twisting and spooling at the McAden Mills, McAdenville, N. C.

H. B. Ellard, of Gainesville, Ga., has accepted the position of overseer of carding and spinning at the Kershaw (S. C.) Cotton Mills.

M. J. Hawkins has resigned as overseer of carding and spinning at the Patterson Mill, China Grove, N. C.

Samuel Taylor has resigned as superintendent of the Drayton (S. C.) Mills. He was presented with a silver loving cup by his employees.

A. B. Everett has resigned his position in the spinning room of the Fountain Inn (S. C.) Mfg. Co., to accept one with the Clinton (S. C.) Cotton Mills.

H. A. Hatch has resigned as overseer of carding at the Marlboro Mills, Bennettsville, S. C., and will return to New England.

A. O. Norris, of Kannapolis, N. C., has accepted the position of overseer of carding and spinning at the Patterson Mfg. Co., No. 1, China Grove, N. C.

Butler McCall has resigned as card grinder at the Carolina Mill, Greenville, S. C. and accepted a position at the Camperdown Mills of the same place.

C. M. Bodwen has resigned as overseer of carding and spinning at the Kershaw (S. C.) Cotton Mills, and will retire from the mill business.

M. C. Sanders formerly with the Texas Company has accepted the position of traveling salesman with the General Fire Extinguisher Co., with headquarters in Atlanta, Ga.

W. T. Royster, formerly overseer of carding at the Jackson Mills, Monroe, N. C., has accepted a position in the cotton dry house No. 4, of the Dupont Powder Works, Petersburg, Va.

Arthur S. Thomas, formerly superintendent of the Stark Mills, Manchester, New Hampshire, has accepted the position of superintendent of the Abbeyville (S. C.) Cotton Mills.

ALBANY

Lubricates mill machinery without waste.



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Send for samples and cup and try it. No charge. Write now.

YOUR DEALER SELLS ALBANY GREASE

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W. E. Ford has resigned as second hand in spinning at the Selma (Ala.) Mfg. Co., and now has a position at the West Point Mfg. Co., Langdale, Ala.

A. H. Tuck has resigned as master mechanic and chief engineer at the Drayton (S. C.) Mills, and accepted a similar position at the Chesnee (S. C.) Mills.

G. P. Smithey has resigned as second hand in No. 4 spinning at the Dan River Mills, Schoolfield, Va., to become night overseer of spinning at the Pickett Mills, High Point, N. C.

Chiquola Mill,

Honea Path, S. C.

J. D. Beacham.....Superintendent
B. F. Williams.....Carder
G. H. Lollis.....Spinner
R. B. Jones.....Weaver
Ben James.....Cloth Room
J. V. Hughes.....Roller Coverer

Southside Cotton Mill,

Winston-Salem, N. C.

Alex. Roberts.....Superintendent
A. S. Starr.....Carder
W. R. Ennis.....Spinner
J. T. Frye.....Weaver
G. C. Starr.....Night Carder
Jesse Powers.....Night Spinner
J. W. Tysinger.....Master Mechanic

Rhode Island Mill,

Spray, N. C.

Wm. Stevenson.....Superintendent
T. J. Hobson.....Carder
B. W. Koontz.....Spinner
F. D. Dehart.....Weaver
J. F. Roddy.....Engineer
H. B. Rayfield.....Master Mechanic

Vass Cotton Mills,

Vass, N. C.

F. L. Craver.....Superintendent
C. C. Holden.....Carder
E. R. Douglas.....Spinner
A. J. Oldham.....Winding
J. A. D. Kennedy.....Master Mechanic

Franklin Cotton Mills,

Concord, N. C.

B. L. Amick.....Superintendent
G. L. Little.....Carder
A. R. Eller.....Spinner
J. W. Reynolds.....Night Carder
J. J. Nichols.....Master Mechanic

Paola Cotton Mills,

Statesville, N. C.

T. M. Crowell.....Superintendent
H. B. Massey.....Carder
P. E. Adams.....Spinner
Will Sells.....Night Carder
Geo. Gregory.....Spinning Section
Kelly James.....Twisting Section

Marion Mfg. Co.,

Marion, N. C.

H. F. Little.....Gen'l Supt.
H. F. Little.....Gen'l Superintendent
J. R. Frye.....Carder
S. N. Bradford.....Spinner
R. O. Wylie.....Weaver
J. T. Laughlin.....Cloth Room
W. M. Clay.....Master Mechanic

Ivey Mill

Hickory, N. C.

H. W. Warner.....Superintendent
G. T. Barger.....Carder
B. D. Abernethy.....Spinner
J. M. Freeman.....Weaver
T. J. Leonard.....Cloth Room
J. B. Clay.....Master Mechanic



Cramer System of Air Conditioning

WITH OR WITHOUT

Automatic Regulation of Humidity and Temperature

Moderate in Cost

Cheap to Operate

Yields Big Returns

STUART W. CRAMER

CHARLOTTE,

NORTH CAROLINA

MILL NEWS ITEMS OF INTEREST

Kannapolis, N. C.—E. C. Lowery has been awarded by the Cannon Manufacturing Co., the contract for the erection of 30 new houses on Ridge Ave.

Long Island, N. C.—The Long Island Mills are installing about 1,000 additional spindles with card room and twister complement. The machinery was purchased from the Saco-Lowell Shops and will be operated on carpet yarns.

Albemarle, N. C.—Holdbrooks and Bradshaw, Salisbury (N. C.) contractors, were Saturday awarded the contract to build a large additional mill for the Efrid Manufacturing Company at Albemarle. This firm already has the contract to build an addition for the Wiscassett Mills at Albemarle and will begin work on it this week. The new mills are estimated to cost \$500,000 complete.

Belmont, N. C.—The Climax Spinning Company of Belmont, was chartered Monday with \$300,000 capital authorized and \$100,000 subscribed, for manufacture of yarns and weaving of cloth from cotton, wool, flax, jute and other fabrics. The subscribers to the stock and amount by each stockholder are: A. C. Lineberger, Belmont, 250 shares; R. L. Stowe, Belmont, 150 shares; W. B. Ruitt, Belmont, 100 shares; and D. E. Rhyne, Lincoln, 250 shares.

Columbus, Ga.—The Eagle and Phenix Mills closed down two days last week, while the corporation will "take stock." This is the regular stock taking time of the concern, and it usually takes two days to complete it.

Everything in the mills is taken stock of; the finished goods in the warehouse; the unfinished goods on the machines; the machines themselves; untouched cotton, etc., in fact, everything in the mill, from end to end, and floor to roof.

Mt. Airy, N. C.—W. D. Burgess, for years one of the leading business men of High Point, N. C., has disposed of all of his holdings there to J. H. Brown, of Mt. Airy, and will shortly move to Mt. Airy, to take active charge of the Laurel Bluff Cotton Mills, which he has purchased.

The monetary value of that transaction was not stated, but it is considerable, involving the Peerless Machine works and the handsome residence of Mr. Burgess on North Main street, High Point, as well as the Laurel Hill Cotton Mills and a handsome residence in Mt. Airy. By the deal Mr. Burgess disposes of his property in High Point to Mr. Brown. In turn, Mr. Brown sells to Mr. Burgess the Laurel Hill Cotton Mills and residential property in Mt. Airy.

Summerville, Ga.—Reports by the officers of a most prosperous year and the declaration of a 10 per cent dividend placed the stockholders of the Summerville Cotton Mills in an exceptional frame of mind at the recent annual meeting of the company. It was also announced that the capacity of the plant would be doubled in the next few months. The officers elected for the ensuing year are: John D. Taylor, president; B. H. Edmondson, vice president; and E. N. Martin, secretary.

Valdese, N. C.—The hosiery mill, the cotton mill, and a roller mill are running at full speed, and the colonists also own a large share in another hosiery mill in a nearby town. An embroidery factory has been built and the machinery bought and paid for, but not yet received inasmuch as it is of German manufacture and is detained at Rotterdam by England's interferences with American commerce. Late advices, however, give hope that it will soon resume and continue its journey, and then it will be quickly installed and the Waldensians will add another to their string of profitable enterprises.

Gaffney, S. C.—The regular annual meeting of the stockholders of the Globe Manufacturing Company was held yesterday morning at 10:00 o'clock in the parlors of the First National Bank. Mr. L. G. Potter, who is president, submitted a very gratifying report. The old board of directors, which consists of Messrs. L. G. Potter, D. C. Ross, H. L. Spears, J. C. Otts, Wm. H. Smith, J. N. Lipscomb, A. C. Pridmore, N. H. Littlejohn, J. A. Carroll and R. S. Lipscomb, were re-elected. L. G. Potter was re-elected president and treasurer with D. C. Ross vice-president, and Henry C. Moore, secretary.

The directors declared a three per cent semi-annual dividend, payable the first of November. While the Globe Manufacturing Company has been steadily making money under the management of Mr. Potter, this is the first dividend it has paid in several years. The stockholders and directors were well pleased and are looking forward to future success and prosperity.

Albemarle, N. C.—Several days of this place and the Efrid Manufacturing Company also of Albemarle,

made the city board of Albemarle this proposition: The bonds for sewer would be purchased by the mills at considerably more than the highest offer of any other company making bids. The mills would pay \$4,000 towards putting down the main line of the sewer system and commence within the next few days and build two additional mills, the Efrid Manufacturing Company one and the Wiscassett Mills Company the other, both to cost when completed not less than half a million dollars. This offer was made to the board of aldermen in consideration that the city would allow the mills to tap the town's sewer line and take care of all future suits against the city and the mill companies for damages that are caused from emptying the sewer. The board at its special call meeting accepted the offer and an architect from Concord will be here soon to take charge of the erection of the mills which are to begin at once. The bonds will be bought by home companies and the sewer system will be put down, work commencing in the next few days.

Along with the two new mills being commenced, the Wiscassett Mills Co. and Efrid Manufacturing Co., would erect near the mills graded school building, a Y. M. C. A. and gymnasium for the operatives of the mills of these two companies. It is said also that the Wiscassett Mills Company is to commence at once the erection of a dwelling for Capt. Denning, the mill's superintendent, which when completed will be one of the most handsome and costly residences in the city. This will be a following of the precedent set by the Efrid Manufacturing Company, that company having just finished a handsome residence for its superintendent, Mr. Bennett.

Parker Interests Have Completed Purchase of Mill.

Lewis W. Parker, of Greenville, who, with J. I. Westervelt, purchased the Enoree Mill property on salesday in July, was in Spartanburg Saturday afternoon to complete the purchase and accept the deed.

In conversation Mr. Parker stated that everything had now been satisfactorily arranged. He said, however, that he was unable to make any statements just at this time as to the plans for the operation of the property, but that some announcement may be expected during the next few days. He will leave for New York this week in the interest of the mill.

Under the ruling of Judge Thomas S. Sease Friday afternoon, at Spartanburg, the Parker interests were allowed to make the necessary overdue payment on the mill and to accept deed to the property.

It is presumed here that the Melville Manufacturing company, recently organized in Greenville, with Allen J. Graham as president, to

HEADQUARTERS SOUTHERN TEXTILE ASSOCIATION MEETING November 2d to 6th OTTARAY HOTEL GREENVILLE, S. C.

The Value of a trade mark is the quality of the product behind it.

We are so sure of the quality of our rawhide loom pickers that we wish to be identified with each one of the pickers which we send out, and therefore stamp our trade mark in the hide of the picker so that it may be plainly seen even when the picker is worn out.



GARLAND MFG. CO., Saco, Maine

operate the mill, will take over the property shortly. J. I. Westervelt, who bought the property with Mr. Parker, disposed of his half interest, it was announced some weeks ago, to C. E. Graham.—Daily Piedmont, Greenville, S. C.

Engine Accident.

The Florence Mill, Forest City, N. C., was thrown out of operation Tuesday morning when the piston rod of the engine broke, tearing up the cylinder head. The accident happened about 8 o'clock. Employees rushed from the building when they heard the crash and at the approach of the steam. Only two men were in the engine room at the time of the accident, both had narrow escapes, one being scalded badly.

It is understood that the engine has been over taxed for several months, hence the accident. A new engine will probably be installed. The mill will be out of operation for probably 30 days.

The Florence Mill is preparing to furnish its own water supply, having been using town water since the installation of the waterworks. An artesian well is being bored between the engine room and the weave room.

Program of Meeting of Southern Textile Association, Greenville, S. C., a P. M. Nov. 5th 1915

Address of Welcome by C. S. Webb, president of Chamber of Commerce.

Response to Address of Welcome by A. M. Dixon, Gastonia, N. C.

President's Address by W. M. Sherard, Williamston, S. C.

"National Labor Legislation" by Congressman J. F. Brynes, Aiken, S. C.

"Manufacture of Fine Yarns" by C. N. Poore, Louisville, Ky.

"Causes of Weave Room Inefficiency," by George Harrison, Greenville, S. C.

Aragon Mill Village Fair.

The annual village fair was given at the Aragon Mill village Oct. 2nd, between the hours of 10 a. m. and 5:30 p. m. The cotton warehouse at the mill had been arranged for an exhibition hall and exhibit of every description were on display there. These exhibits were as good as could be wished for, in fact, Maj. W. B. Moore of York, suggested that the York County Fair Association could do no better than to secure the exhibits of the Aragon Mill fair for the county fair.

After allowing those present to view the exhibits while music was furnished by the Carhartt Band, Superintendent Parks of the Aragon Mill invited the crowd present to a



Keeping the Textile Plant Young

is a problem—the problem that taxes the best in any manager—leads directors to seek the best managers. Its final test is efficiency—in the man and machinery.

THE TURBO HUMIDIFIER

was designed on the idea of plain, old-fashioned efficiency. Something that would keep young a long time; something that would do the work and give busy managers time to think of other problems. We want to talk to you on these lines—and these only.

THE G. M. PARKS CO.

Fitchburg, Mass.

Southern Office Commercial Building, Charlotte, N. C.

J. S. COTHRAN, Manager.

grove nearby where a stand had been erected for the speakers and seats placed for the audience. Mr. Parks acted as chairman and introduced the speakers, the first being R. C. Burks, superintendent of the Rock Hill schools. He was followed by Mayor J. C. Hardin, Miss Mary E. Frayser of the department of home economics of Winthrop College, who has charge of mill village improvement work in this state; Major W. B. Moore of York, president of Neely and Lockmore Mills; H. R. Tucker of the local Y. M. C. A., and Alex Long, president of the Aragon Mill. Mr. Long concluded his remarks by stating that there would be established October 10th a night school at the Aragon and that by this time another year he hoped that the Aragon Mill would have abolished illiteracy.

Everything in connection with the fair compared favorably with anything that has ever been shown in that section, and some were far ahead. At 12:30 an excellent picnic dinner was served. One most noticeable feature of the serving of this dinner was that the children were called up and served first. There were soup and barbecued meats in abundance, and basket dinners of chicken, cakes, pies, etc.

The afternoon was taken up in viewing the exhibits and in athletic games under the direction of H. R. Tucker of the local Y. M. C. A. The weather was favorable and the fair well attended.

Amazon Mills Win Prizes.

The Amazon Cotton Mills of Thomasville, N. C., won first prize for the best float in parade on "Everybody's Day" recently held at Thomasville.

Prices Advancing on Cotton Underwear.

Further price changes representing advances for several of the leading lines of men's cotton ribbed shirts and drawers and union suits were reported in the underwear market yesterday. The rapidly advancing cotton market is the immediate occasion for these advances, and in addition most of the mills making ribbed underwear are understood to be well engaged for a number of weeks ahead, having orders that will keep them busy until November 1 at least. The situation in cotton as it affects the heavy underwear business was also reflected in the announcement by the P. H. Hanes Knitting Co., of which Clift & Goodrich are selling agents, that they will not take business at this time for December delivery which represents the customary spring business usually under way at this season of the year. —Journal of Commerce.

TEXTILE BOOKS

Carding and Spinning, by G. F. Ivey.—Price \$1.00. A practical book on carding and spinning which will be found useful.

Carding Lessons for the Mill Boy.—Vaughan—Price \$1.00. A practical carder. Written especially for young carders.

Cotton Mill Processes and Calculations—By D. A. Tompkins—Price \$5.00. An elementary text book for textile schools and self-instruction. Every operation in the ordinary cotton mill is explained simply and with the use of illustrations. Contains much information of value to the experienced man. 395 pages; 33 illustrations; cloth.

Plain Series of Cotton Spinning Calculations—by Cook—\$1.00. A unique and valuable book giving the calculations used in mixing, carding, drawing, and spinning cotton, also original drawings showing points where changes of drafts, speeds, etc., should be made. Setting, production, doublings. 90 pages; freely illustrated; cloth.

CLARK PUBLISHING COMPANY

CHARLOTTE, N. C.

AMERICAN MOISTENING COMPANY

BOSTON, MASSACHUSETTS

WILLIAM FIRTH, President

FRANK B. COMINS, Vice-Pres. and Treas.

THE ONLY PERFECT SYSTEM OF AIR MOISTENING
COMINS SECTIONAL HUMIDIFIER

JOHN HILL, Southern Representative, 1014 Healy Building, ATLANTA, GEORGIA

Cotton Goods Report

New York.—Cotton goods markets business could have been put ruled strong and active last week, through had manufacturers been with prices going steadily upward, willing to make contracts further Commission men are very much ahead. Trading, while covering a concerned as to how far the rise in large number of styles, was as has prices will go, and express the gen- been the case generally during the eral opinion that as there are no last few months, was mostly con- signs of speculation, the advance fined to wide and medium width prices may be expected to continue goods.

Gray goods continued active, and Quotations on 28-inch goods were by the middle of the week, prices on an eighth cent higher than those of print cloths were a quarter cent the previous week and the 27-inch higher than those quoted during the goods showed practically the same advance. Sateens showed some ac- previous week. Many of the mills tivity and there was a fairly good do not care to enter into contracts volume of business done on these too far ahead, but those who are goods. There was some trading on twills, but narrow goods continued dull.

Prices on cotton goods were quot- ed in New York as follows:
Print cloth, 28-in std. 3 3-8 —
28-in., 64x60s 3 1-4 —
Gray goods, 39-inch
68x72s 5 1-8 —
38 1-2-inch, 64x64s. 4 3-8 —
4-yard, 80x80s 6 1-4 6 3-8
Brown drills std. 6 1-4 —
Sheetings, So. std. 6 3-4 —
3-yard, 48x48s 6 1-2 —
4-yard, 56x60s 5 1-2 5 5-8
4-yard, 48x48s 5 —
4-yard, 44x44s 5 1-4 —
5-yard, 48x48s 4 1-2 —
Denims, 9-ounce 14 —
Selkirk, 8-ounce, d'k. 11 1-2 —
Oliver, Extra, 8-oz. 11 1-2 —
Hartford, 11-oz. 40-in
duck 15 1-4 —
Woodberry sail d'k. 27 1-2% —
Mt. Vernon white d'k. 35% —
Ticking, 8-ounce 11 1-2 —
Standard prints 5 1-4 —
Standard gingham 6 1-4 —
Fine dress gingham 7 8 3-4
Kid finished cambrics 4 1-4 4 1-2

Brown and bleached sheetings and staple Southern gingham were advanced during the week. Bleach- ed cotton goods held firm during the week and deliveries on old con- tracts were large last week. The best known lines are being very firmly held and some of them were withdrawn until further develop- ments in the market. Sheets, pil- low cases and wide sheetings are now very generally well sold ahead.

New business was received in this market from many sections of the country and out-of-town buyers were numerous in the markets last week. The advances named on brown goods, sheetings and drills brought prompt requests from buy- ers who would not operate in the market when prices were fully ten per cent below present levels.

In many cases, deliveries are not being made on goods that were bought at bottom prices last Aug- ust and this fact is forcing many buyers in the market for spot goods. There is some anxiety felt concern- ing the probability of deliveries on many of the low price contracts that were accepted willingly enough at the time that it was thought the present cotton crop would be sold at 8 cents.

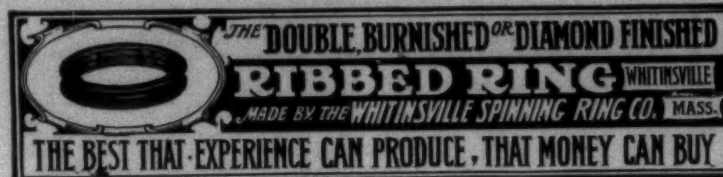
The colored goods markets are much firmer, especially on the coarser end. The difficulty of as- suring customers of the fastness of dyes is coming up every day to bother buyers and they are trying now to clean up any cloths that are fast dyed and guaranteed. In some houses sellers are able to command their own price on odd lots of col- ored specialties such as are used in the manufacturing trades for work- ing suits and other suiting purposes.

The Fall River print cloth market continued in a strong position dur- ing last week. The inquiry and trading were good and further ad- vances in prices were named. The total sales for the week were about 220,000 pieces, and considerably more

Crop Movement Into Sight.

Comparisons for the week ended Friday, October 1, 1915:

Weekly Movement			
	1915.	1914.	
Port receipts	290,901	162,221	
Overland to mills and Canada	9,882	5,646	
Southern mill takings (estimated), exclus- ive of takings from Southern ports	65,000	70,000	
Gain of stocks at in- terior towns	67,000	72,406	
Brought into sight for the week	432,783	310,273	
Port receipts	1913.	1912.	
Overland to mills and Canada	424,947	450,344	
Southern mill takings, (estimated), exclus- ive of takings from Southern ports	8,465	5,084	
Gain of stocks at in- terior towns	75,000	75,000	
Brought into sight for the week	60,442	31,591	
Port receipts	568,854	562,019	
Overland to mills and Canada	1,030,826	451,790	
Southern mill takings (estimated), exclus- ive of takings from Southern ports	48,746	18,194	
Gain of stocks at in- terior towns	365,000	242,887	
Brought into sight for the week	150,652	198,028	
Port receipts	1,595,224	900,809	
Overland to mills and Canada	733,235	733,235	
Southern mill takings (estimated), exclus- ive of takings from Southern ports	64 days	63 days	
Gain of stocks at in- terior towns	1913.	1912.	
Brought into sight for the week	3,952,300	1,752,511	
Port receipts	38,966	22,256	



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CENTRAL FALLS, R. I.

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as the place to manufacture cotton goods is illustrated in the increase of 67% quoted by census department. We can offer attractive situations for those desiring to enter this field.

J. A. PRIDE

General Industrial Agent Seaboard Air Line Railway

NORFOLK, VIRGINIA.

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Send us a worn shuttle with completely filled bobbin and state kind of goods woven and name of loom. These will explain your needs and help us to design an efficiency shuttle for your requirements. This shuttle has the approval of loom builders and weaving experts. It should help you to weave better fabric at a lessened expense.

SHAMBOW SHUTTLE COMPANY

Woonsocket, R. I.

Southern mill takings 329,796 291,873
Stock at interior towns in excess of Aug. 1 123,511 142,532
Brought into sight thus far for season 2,244,784 2,107,702
Brought into sight during September .. 1,626,570 1,451,769
The total crop move- ment is respectively for 64 days 65 days..
*2,683 added (Texas City, etc.)
Shronk stopped his motor car at as he drove off, "guess your way to a desolate crossroads and yelled to Croydon."—Ex.

a farmer who lay on a cart of fer- tilizer: "Hey, Cornsilk, is this the way to Croydon?"

The farmer raised himself from the fertilizer in astonishment. "By heck, stranger, how did you know my name was Cornsilk?" he asked.

"I guessed it," said the motorist.

"Then, by heck," said the farmer

The Yarn Market

Philadelphia, Pa.—Business in the yarn market was spotty last week, some dealers getting a good share of the trading, while others did not do much. The largest part of the week's business went to those who were able to compete on prices, and could sell yarns under the prices quoted by spinners. Deliveries were good to weavers and knitters, and collections were good. It was hard to arrive at actual values in the market last week owing to the rapid rise in the cotton market and its effect on the yarn market. Spinners became decidedly firmer in their quotations, as cotton went higher and some yarns were advanced as much as 3 cents over the price of the previous week. Fixed quotations were almost impossible last week, salesmen being required to submit all orders subject to spinner's acceptance, making it a hard market to deal with.

There is a variety of opinions as to the future course of yarn prices, but it is generally agreed that the advance was due to higher cotton and future prices depend on what cotton will do. Some think that the rise in cotton will not last, believing that it is due to a speculative bull movement, but it is also pointed out that the new crop is coming on slowly, and that the remainders of last year's crop is held in strong hands and there is little chance of a decline.

There were some good sales of carded knitting yarns to knitters during the week, these being made at various prices. Spinners prices were generally high. There was a good demand for weaving yarns in spots. Dealers unloaded some yarns after the break in cotton and a few of the spinners reduced prices, only to put them back when the market became strong again.

The demand for single combed was not very active last week, as many of the users of these yarns are now being affected by the dry shortage. Prices were very irregular on these yarns, depending on how badly the spinners needed business. Southern spinners are well sold on these yarns and holding prices firm.

Southern Two-Ply Skeins.

4s to 8s	17	—19
10s to 12s	18 1-2	—19
14s	19	—19 1-2
16s	19 1-2	—20
20s	21	—21 1-2
24s	22	—
26s	22 1-2	—
30s	24	—24 1-2
36s	28	—
40s	30	—31
50s	37 1-2	—38
60s	—	—42
3-ply 8s upholstery	17 1-2	—
4-ply 8s upholstery	17 1-2	—

Southern Single Skeins.

4s to 8s	16 1-2	—17 1-2
10s	18	—18 1-2
12s	19 1-2	—20

14s	18 1-2	—
16s	20	—
20s	21	—
22s	21 1-2	—
26s	—	—22
30s	—	—25

Southern Single Chain Warp.

10s to 12s	18	—18 1-2
14s	18 1-2	—20
16s	19	—20
20s	—	—21
22s	21 1-2	—22
24s	—	—22
26s	22	—22 1-2
30s	—	—24
40s	—	—31

Southern Two-Ply Chain Warps, Etc.

8s to 10s	17 1-2	—18 1-2
12s to 14s	19	—20 1-2
2-ply 16s	—	—21
2-ply 20s	22	—
2-ply 24s	22 1-2	—23
2-ply 26s	22 1-2	—23
2-ply 30s	—	—25
2-ply 40s	—	—31
2-ply 5s	38	—40
2-ply 60s	—	—42

Southern Frame Cones.

8s	18 1-2	—
10s	19	—
12s	19 1-2	—
14s	20	—
16s	20 1-2	—
18s	20 1-2	—
20s	20 1-2	—
22s	21	—
24s	21 1-2	—
26s	22	—22 1-2
22s fleece colors	21	—
30s	23 1-2	—
40s	30	—

Eastern Carded Cops.

10s	21	—
11s	21 1-4	—
12s	21 1-2	—
14s	22	—
16s	22 1-2	—
18s	23	—
20s	23 1-2	—
22s	24	—
24s	24 1-2	—
26s	25 1-2	—
28s	26 1-2	—
30s	28	—

Eastern Carded Peeler Skeins and Warps.

2s, 2-ply	26 1-2	—
22s, 2-ply	27	—
24s, 2-ply	28 1-2	—
26s, 2-ply	29 1-2	—
30s, 2-ply	31 1-2	—
45s, 2-ply	36 1-2	—
50s, 2-ply	46	—

At a movie the other day a picture was shown entitled:

"As God Made It."

Immediately following the projection of the title on the screen came the flash:

"Approved by the Ohio Board of Censors."—Ex.

Manufacture of High Grade Knitting Yarns.

(Continued from Page 8.)

bad bobbins are bad things to have in a spinning room also, as they will give the winders and knitters all kinds of trouble, as they slip and jump, and cause the yarn to have very soft places in it.

A Poor Band.

Another chance to make bad yarn is with a band that is not made the right size, and not tied on properly. I prefer a roving band that runs about 120 to the pound. I have tried them all sizes, but this seems to stay on the longest and give the best satisfaction, and if it is tied on properly it will make very little soft yarn when it starts to come off. But I have yet got to find a band that can be relied on not to make some soft yarn, and if the overseer will examine closely the bobbins on the spindles where the bands come off he will find some soft yarn on them, that sometimes will slip through the winders, and give the knitters lots of trouble, and they will kick on soft spots. In order to keep this soft yarn off the cones I require the band boy to take the bobbin off the spindle and start the end to spinning on an empty bobbin. After he gets the bands all on I have him pull the soft yarn off the bobbin, and take it to the winders to be used. The reason this soft yarn makes its appearance on the bobbin before the band comes off is that the band is sometimes a long time in breaking, but continues to get weaker, and during this time we get yarn from that spindle with all kinds of twist, and if the spinner comes along after the new band has been tied on and puts the end up if it is not very soft it will slip through on the cone, but very often it won't run on the knitting machine, and one or two bad cones of yarn in a case will cause the whole case to be condemned.

Great care should be taken to keep all lint and oil off the yarn and the suggestions I have given about the other machines hold true with the spinning, as we must keep the yarn clean and free from both oil and dirty cotton, and while it is absolutely necessary to keep the machinery clean as possible, yet it is better to put it in the waste than on the yarn. And if the operatives are not very careful every time they wipe their roving, and guides they will get dirty lint in nearly all the bobbins on their work. It will be found to a great advantage to clean often and carefully, as frames kept clean will certainly make better yarn than dirty ones.

If we card and spin properly we have very little trouble in getting the winding done right, as it will be found that the winder help will take lots of pride in winding good yarn, but some times it will happen that some of the winder help is careless and will make bad work if not watched and reprimanded.

The way that I keep check on the quality of my winding is to take whole doff cones from one hand only, and stand and see them run off. This way is much better than taking a few cones from each hand,

THE NORTH CAROLINA COLLEGE OF AGRICULTURE and MECHANICAL ARTS

Young men seeking to equip themselves for practical life in Agriculture and all its allied branches; in Civil, Electrical and Mechanical Engineering; in Chemistry and Dyeing; in Textile Industry and in Agricultural Teaching will find excellent provision for their chosen careers at the State's Industrial College. This college fits men for life. Faculty for the coming year of 65 men; 767 students; 25 buildings. Admirably equipped laboratories in each department.

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West Raleigh, N. C.

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CAROLINA, CLINCHFIELD & OHIO RAILWAY
and
Carolina, Clinchfield & Ohio Railway
of South Carolina.
EFFECTIVE AUGUST 9, 1915.
Eastern Standard Time

Southbound.

Lv. Elkhorn City, Ky.	3:00
Lv. Haysi, Va.	3:37
Lv. Fremont, Va.	4:10
Lv. Dante, Va.	4:55
Lv. St. Paul, Va.	5:30
Lv. Speer's Ferry, Va.	7:25
Lv. Johnson City, Tenn.	9:30
Ar. Erwin, Tenn.	10:30
Lv. Erwin, Tenn.	5:00
Lv. Kona, N. C.	7:18
Lv. Altapass, N. C.	8:10
Lv. Marion, N. C.	9:50
Lv. Bostic, N. C.	11:33
Ar. Spartanburg, S. C.	1:30

Northbound.

Lv. Spartanburg, S. C.	4:50
Lv. Bostic, N. C.	6:09
Lv. Marion, N. C.	7:05
Lv. Altapass, N. C.	8:20
Lv. Kona, N. C.	8:57
Ar. Erwin, Tenn.	10:30
Lv. Erwin, Tenn.	7:45
Lv. Johnson City, Tenn.	8:30
Lv. Speer's Ferry, Va.	10:35
Lv. St. Paul, Va.	12:17
Lv. Dante, Va.	12:40
Lv. Fremont, Va.	1:25
Lv. Haysi, Va.	1:55
Ar. Elkhorn City, Ky.	2:30

*—Daily.

A. M. light face type.

P. M. heavy face type.

Patrons are requested to apply to nearest agent for definite information, or to

CHAS. T. MANDEL,
Asst. Gen'l Pass. Agent.

J. J. CAMPION,
V.-Pres. and Traffic Mgr.,
John City, Tenn.

as it is very hard to watch so many at one time. Where the winder hands tie the knots with a knotter it is better than by hand, but either way his its advantage and disadvantage, and it is well to watch that end of the process closely also.

The slub catchers should be set close enough to catch all kinds of imperfections, and that is just as close as they will go, not to clamp the thread. Don't allow the bobbins to fall on the floor, and get soiled, but if they do, carry them to the waste basket and not let any of it get on the cones.

If this article happens to fall into the hands of any one having trouble with the sale of his yarns and he will adopt these suggestions, I am sure that he will overcome his trouble.

Personal Items

D. M. Beaver has been promoted to second hand in carding at the Corriher Mills, Landis, N. C.

W. D. Beverly of Anderson, S. C., is now the Southern representative of the Seal Products Co. of Chicago, Ill.

Henry Tillison of the Tucapau (S. C.) Mills, has accepted a position with the Gluck Mills of Anderson, S. C.

L. W. Brander, president of the Brander Cotton Mills, Concord, N. C., has purchased a house near the mill for himself.

W. D. Burgess of High Point, N. C., has purchased and will manage the Laurel Bluff Cotton Mills of Mt. Airy, N. C.

P. P. Jones overseer of carding and spinning at the Corriher Mills, Landis, N. C., was in Charlotte last week to visit his daughter who was operated upon at a hospital.

Robt. J. Walker of Charlotte, Southern representative of the Berlin Aniline Works, left last week for Europe in the interest of his company.

Audria Alexander of Charlotte, N. C., has accepted the position of physical director and associate secretary of the Mill Y. M. C. A. at Kanapolis, N. C.

Excursion Rates to Greenville For Big Exposition.

The Southeastern Passenger association has issued joint passenger tariff No. 6453, excursion rates to Greenville, S. C., and return, account of Southern Textile exposition, good November 1st, 2d, 3d, 4th and 5th, return limit November 9th.

This tariff covers points in Alabama, Arkansas, District of Columbia, Georgia, Illinois, Indiana, Kentucky, Mississippi, Missouri, North Carolina, South Carolina, Tennessee and Virginia and was issued on request of the Greenville Chamber of Commerce.

Run Down By Gas-Electric Car.

E. Berry Sanders, of the Gluck Mills, Anderson, S. C., was struck and knocked down Sunday evening by the east bound gas-electric car on the Blue Ridge road. The man was lying on the tracks near the new station, in the cut between the Ligon and Ledbetter building. He was lying between the rails and the motorman of the car was unable to see him until he was almost on the body. The curve and the buildings on each side obstructed the motorman's view until he rounded the short curve just at where the man lay. Motorman J. H. Maxwell stated that he saw the man as he came around the curve. He was lying right in the middle of the track with one leg crossed over the rail. The motorman did everything in his power to stop the car but was unable to do so before hitting the man. The wheels did not pass over

the body, but rather the pilot struck him and rolled him along the track for a few feet.

Medical assistance was summoned and all that could be done for the man was done as he lay in the tracks. After a few moments work, the doctors took him to the hospital in an ambulance and dressed his wounds there. There is a good chance for his recovery. A pint bottle of whiskey was found near him.

Arm Caught in Picker.

Colon Young, a boy 14 years of age, had his right forearm badly injured at Brockford (N. C.) Mills, where he was working. The arm was caught in the picker rolls and was badly lacerated up to the elbow. He was carried to the Richard Baker hospital where the wounded arm was dressed.

Japanese Subsidizes Dyestuff and Chemical Industry.

An outline of the plan of Japanese Government to subsidize a dyestuff and chemical industry in order to make Japan independent of German concerns was made public Monday by the Bureau of Foreign and Domestic Commerce at Washington, D. C. Under a bill passed by both houses of the Japanese Diet, subsidies will be granted for 10 years to concerns, one-half of the capital of which is owned by Japanese subjects.

"The manufacture of the materials for gunpowder will be regarded as the manufacture of dyes and chemicals," the announcement said. "As has been the case with other countries, Japan has suffered severely from the shortage of dyestuffs and chemicals since the outbreak of the war. In normal times the imports of the dyes were valued at about \$3,500,000 a year, nearly all of which came from Germany."

To the President of the United States and to the Committee on Finance of the Senate, and the Committee on Ways and Means of the House of Representatives:

(Continued from Page 10.)

pleted supplies by sending to us enormous quantities of manufactured goods.

Competition for the American market will result in the fiercest commercial warfare that the world has known, and a wise solicitude for our national welfare should prompt such a revision of our tariff laws as will place the nation in a state of preparedness against invasion of foreign goods.

If our motto is to be "America First", then we respectfully urge your earnest attention to the danger which will threaten American manufacturing industries unless tariff duties, adjusted to the new conditions and to the growing demands for increased revenue, are put into effect in place of duties based upon entirely different conditions and circumstances.

Adopted at the Ninety-ninth Meeting of The National Association of Cotton Manufacturers, September 11, 1915.

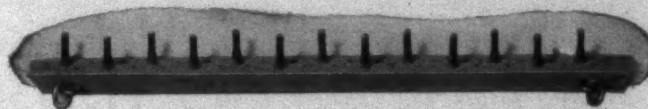
FOR SALE

20 Lowell Machine Shop Spoolers, for all practicable purposes, as good as new. These Spoolers will be sold at a bargain.

Also, about 10,000 4x6-inch Metal Head Spools, all in good condition. Will be sold cheap. Parties interested write

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Quality and workmanship guaranteed, deliveries prompt.

WRITE FOR PRICES.

SCOTCH SIZE OR KLEISTER



This is an old preparation well known to the majority of Cotton Manufacturers, on account of the general satisfaction it has always given. A binder for both fine and coarse counts as it combines readily with any starches on the yarn. Manufacturers of exports and denims find it valuable, as it reduces shedding and loom waste to a minimum. Should use Raw Tallow or Soluble Tallow in addition. Write for formula.



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PROPER LOCATIONS FOR MILLS.

United States Census figures show that since 1880 the consumption of cotton in mills of the cotton growing States has increased 1,502 per cent, as compared with an increase of only 93 per cent in all other states. In the twelve months ended August 31, 1914 Southern mills consumed 162,087 more bales of cotton than the mills of all other States. Three-fourths, or 9,000,000, of the total cotton spindles in the cotton growing States are tributary to Southern Railway tracks. Of the 200 knitting mills in the South over 125 are located along the Southern Railway. Nearly all the Southern woolen and silk mills are also on Southern Railway tracks.

There is a reason for this, and it is not difficult to understand.

The Southern Railway Lines enter and serve most completely those portions of the South where the textile industry is the greatest success, because there are found all the conditions which makes for successful manufacture—the proper transportation facilities, the ease with which the raw material and the needed fuel may be secured, the supply of good labor, the pure water, the low cost of power, and favorable local conditions.

Not only for textile plants but for all other industries the best advantages will be found in this territory.

If you have a plant to locate, let us take up with you the question of the proper location. Your plans will be held confidential. Our knowledge of conditions at various points and our experience in locating other mills and the time of our agents in making special investigations are at your service if desired.

**M. V. RICHARDS, Industrial and Agricultural Commissioner,
Southern Railway.**

Room 129,

Washington, D. C.

Want Department

Want Advertisements.

If you are needing men for any position or have second hand machinery, etc., to sell the want columns of the **Southern Textile Bulletin** afford the best medium for advertising the fact.

Advertisements placed with us reach all the mills and show results.

Employment Bureau.

The Employment Bureau is a feature of the **Southern Textile Bulletin** and we have better facilities for placing men in Southern mills than any other journal.

The cost of joining our employment bureau is only \$1.00 and there is no other cost unless a position is secured, in which case a reasonable free is charged.

We do not guarantee to place every man who joins our employment bureau, but we do give them the best service of any employment bureau connected with the Southern textile industry.

Farm For Sale.

For Sale—100 acres well improved farm, one mile from 15,000 spindle cotton mill, Goldville, S. C. Good schools and churches. New 4-room dwelling. New barn. Two tenement houses, and necessary outhouses. 75 acres are under cultivation. Ideal farm in many respects. Write for further particulars and price to Farm, care Southern Textile Bulletin.

Wanted.

Overseer for spinning, twisting and warping, in a new 15,000-spindle combed yarn mill, about to be built to make from 40s to 120s. To be located in a clean and healthy town not far from Charlotte, N. C. Good wages to right man. Address "Spinner," care Southern Textile Bulletin.

WANT position as superintendent. Would like to figure with any mill that is not getting results. No 1210.

WANT position as superintendent or as carder and spinner. Experienced in both yarn and weaving mills, and can give satisfaction. Am now employed, but would change for larger mill. Address No. 1241.

WANT position as overseer of large card room or as asst. Supt. Now employed but would change for larger job. Good references. Address No. 1212.

Help Wanted.

Wanted — Slubber, intermediate and speeder tenders. Lincoln Cotton Mill Co., Evansville, Ind.

For Sale.

38 deliveries drawing 12-inch coilers, Saco-Pettee make; 6 deliveries drawing, 10-inch coilers, Pettee make; 8 deliveries drawing, 10-inch coilers, Lowell make. All with metallic rolls. 1 Providence 10x5 Intermediate, 72 spindles each; 5 Providence 7x3 fine frames, 160 spindles each; 1 cleaning trunk for pickers; 21 F. & J. spinning frames, 208 spindles, 1 1-2-inch rings; 2 1-2-inch guage, double roving creels; 11 F. & J. wet twistors, 192 spindles, 1 3-4-inch rings, 4-ply creels.

All this machinery now running and producing a high-grade yarn, but is to be replaced in next 90 days with different machinery. This machinery in good physical condition. Prices reasonable. For further information address Cherry Cotton Mills, Florence, Ala.

WANT position as superintendent of small mill or as carder and spinner. Have had long experience and always give satisfaction. Reason for changing better salary. Age 45. Married. Strictly sober. Experienced from ground up on both white and colored work. Address No. 1213.

WANT position as superintendent or overseer of carding. Have experience and knowledge of the business and can furnish entirely satisfactory references from former employers. Address No. 1215.

WANT position as overseer of spinning and winding. Have had 12 years experience as overseer. Age 35. Strictly sober. Good manager of help. Now employed. Good references. Address No. 1216.

WANT position as Supt. or overseer of carding. Age 41. Married. Graduate of Inter. Cor. School. Have been successful as overseer of carding, spinning, weaving, slashing, beaming and dyeing.

WANT position as Supt. Long experience as carder and spinner and am now employed as Supt. of small mill. Best of references. Address No. 1218.

WANT position as overseer of large card room or as assistant superintendent. Now employed but would change for larger job. Address No. 1219.

WANT position as overseer of spinning. Experienced in both positions, in weaving and spinning mills. Now employed. Satisfactory references. Address No. 1217.

WANT position as Supt of yarn mill or carder. Long practical experience on all classes of yarn from 4s to 180s. Also experience on automobile tire fabrics. Address No. 1220.

WANT position as overseer of spinning at not less than \$3.50 per day. Have 20 years experience in mill work and am at present employed, but prefer to change. Address No. 1221.

WANT position as superintendent. Now superintendent of small mill and giving satisfaction, but want larger job. Was overseer of carding for many years. Fine references. Address No. 1222.

WANT position as superintendent or overseer of large card room. Long experience in one of the most successful mills in the South and can give them as references. Address 1223.

WANT position as master mechanic. Have had 15 years experience in shop and steam plant and can give satisfaction. Can furnish excellent references. Have family of mill help. Address No. 1224.

WANT position as superintendent of yarn mill or superintendent of large spinning room. Have 23 years' experience as carder and spinner, 18 years of which have been overseer. Strictly sober. Now employed. Good references. Address No. 1225.

WANT position as superintendent of 10,000 to 20,000 spindle mill in N. C., or S. C. Age 48. Have 30 years experience on wide variety of white and colored goods. Have been superintendent for 20 years and am now employed. Strictly sober. Good references. Address No. 1226.

WANT position as Supt. Am now employed and have held present job 10 years but want larger mill. Good references. Address No. 1227.

WANT position as overseer of spinning or carding and spinning. Long experience. Now employed. Good references. Will not consider less than \$2.50. Address No. 1228.

WANT position as overseer of weaving. Have been promoted from loom fixer through to overseer at present mill, which is discarding its looms. Fine references from present employers. Address No. 1229.

WANT position as superintendent or overseer of weaving. Held one position seven years and can give all former employers as reference. Address No. 1230.

WANT position as superintendent. Prefer a yarn mill. Have had long experience and can furnish the best of references from former employers. Address No. 1231.

WANT position as overseer of weaving. Now employed as second hand on fancy fine goods. Can give good references from present and past employers. Address No. 1232.

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WANT position as superintendent of weaving or yarn mill of not less than 15,000 spindles. Now employed as superintendent, but want larger mill. Fine references. Address No. 1233.

POSITION wanted as superintendent by practical man of executive ability, fully capable of managing a mill, one who will stay on the job and get results. 12 years overseer. 10 years superintendent. Experienced on plain and fancy weaves. A-1 references. Address No. 1234.

WANT position as superintendent, overseer of weaving or traveling representative. Have had experience in all three positions and am well qualified for each. Would prefer connection with some sizing manufacturer. Address No. 1235.

WANT position as carder or spinner, 18 years overseer of carding and spinning, and am well versed in all processes of cotton manufacturing, including twisting and twine-making. Am a middle-aged man with family. Can give good references. Address No. 1236.

WANT position as superintendent of small mill, where I can invest part of my salary. Have long experience as overseer of carding and am now employed as such but want place as superintendent. Age 35. Good habits. Excellent references from present employers. Address No. 1237.

WANT position as overseer of weaving. Have had long experience on both white and colored work and all makes of looms. Can furnish satisfactory references. Address No. 1238.

WANT position as superintendent or as overseer of large card room. Have had long experience in both positions with special reference on fine yarn. Best of references. Address No. 1239.

WANT position as superintendent of either yarn or weave mill or carder in large mill. Now employed, but want larger job. Good experience and references. Address No. 1240.

WANTED—Position of overseer of weaving, preferably Drapers, at \$4.00 or more per day. 19 years in the weave room. 36 years of age. Married. Total abstainer. Now employed as overseer. Pusher for production, quality and low costs. Present salary inadequate for large growing family. Address No. 1241.

WANT position as superintendent of medium sized mill or overseer spinning in large mill. Have had long practical experience and can furnish excellent references. Address No. 1242.

WANT position as superintendent of weaving mill. Experienced on both white and colored goods. Familiar with all departments and am now employed as superintendent. Address No. 1243.

WANT position as Supt. or manager. Now employed as Supt. but in undesirable location and prefer to change. Long experience and fine references. Address No. 1244.

WANT position as superintendent of either plain weaving or yarn mill. Am all-round practical mill man, but especially strong on carding. Have made a close study of waste problems and am in position to more than save my salary in the waste account. Let me investigate your waste conditions. Correspondence confidential. Address No. 1245.

WANT position as overseer of weaving. Draper or plain looms. Am experienced on drills, duck, osnaburg and sheetings. Can give good references as to character, and ability to get the required production. Address No. 1246.

WANT position as overseer of twisting, spooling and winding. Age 30. Married. Strictly sober. Can give present employers as reference. Address No. 1247.

WANT position as overseer of carding. Now employed, but want larger job. Special experience on combers and fine work. Satisfactory references. Address No. 1248.

WANT position as overseer spinning in small mill or second hand in large mill. 39 years of age, with 27 years experience in spinning. Prefer mill in a small place. Good references. Address No. 1249.

WANT position as overseer of spinning. Reason for changing to better myself. Now employed. Address No. 1250.

WANT position as superintendent of medium sized mill or overseer of spinning. Eight years experience as overseer. Married. 42 years of age. Good references. Can change on short notice. Address No. 1251.

WANT position as superintendent. Have been superintendent of some of the most prosperous mills in the South and have long experience on a wide variety of goods. Fine references. Address No. 1252.

WANT position as superintendent. Now employed but for good reason prefer to change. Am a good manager of help and have always made good. Satisfactory references. Address No. 1254.

WANT position as superintendent. Now hold traveling position but wish to return to mill. Long ex-

perience as superintendent and always made good. Fine references from former employers. Address No. 1255.

WANT position as superintendent or overseer of carding or spinning. Can furnish present and former employers as references. Only reason for changing is that I want larger job. Address No. 1256.

WANT position as overseer of weaving. Have had long experience and am now employed, but for good reasons prefer to change. Fine references. Address No. 1257.

WANT position as superintendent or overseer of carding and spinning. Long experience and am now employed. Can furnish satisfactory references. Address No. 1259.

WANT position as overseer of weaving at not less than \$3.00 per day. Now employed and give satisfaction but prefer different kind of job. Address No. 1260.

WANT position as overseer of carding or spinning or both. Have had long experience and can furnish best of references both as to character and ability. Address No. 1261.

WANT position as carder or spinner. Now employed at night and give satisfaction but want day job. Can furnish good references. Address No. 1262.

A THOROUGHLY COMPETENT AND ENERGETIC YOUNG SUPERINTENDENT OF 30 YEARS WANTS larger position. Am practical and capable of giving good service on either plain, fancy or colored goods. Will be pleased to submit references and correspond with any good size mill needing a man. Address No. 1263.

WANT position as engineer and master mechanic. 15 years experience in engine room and shop. Am employed at present but desire to change. Good references. Address No. 1264.

WANT position as superintendent of large mill. Now employed in good size mill and give entire satisfaction but want larger job and am competent to handle one. Address No. 1265.

WANT position as superintendent of yarn mill. Have had long experience and can furnish best of references from former employers. Address No. 1266.

POSITION as superintendent wanted by a practical mill man. Have had 14 years experience as superintendent and thoroughly understand all details connected with the manufacturing of cotton goods. Can give A-1 references as to ability and character. Address No. 1267.

WANT position as mill machinist or master mechanic. Understand cotton mill work and all kinds of brazing. Now employed. Good references. Address No. 1268.

WANT position as superintendent or overseer of large weave room. Have had long experience and handled some of the most successful mills in the South. Can furnish good references and get results. Address No. 1269.

WANT position as overseer of spinning. Am now employed and giving satisfaction, but want better mill. First class references. Address No. 1270.

WANT position as superintendent or office man. Besides having long experience as superintendent, as a thoroughly experienced bookkeeper and accountant. Address No. 1271.

WANT position as superintendent. Prefer a yarn mill. Age 39. Strictly sober. Have held present position six years and can furnish first-class references. Address No. 1272.

WANT position as overseer of carding. Would accept second hand in a large mill. Now employed and have had long experience. Best of references. Address No. 1273.

WANT position as superintendent of yarn mill or as overseer of carding. 12 years experience as overseer and can get results. Married and strictly sober. Address No. 1274.

WANT position as overseer of spinning. Have had long experience and have run large rooms successfully. Can furnish best of references. Address No. 1275.

WANT position as superintendent, overseer of weaving or traveling salesman. Have had experience in such positions and can furnish good references. Address No. 1276.

WANT position as bookkeeper or office man in cotton mill. Eight years experience in cotton mill office work and at present have charge of a mill office. Best of references. Address No. 1277.

AN EXPERIENCED MAN wishes to correspond with a mill that needs a superintendent that can get results. Age 3. Married. Held last position nine years. Gilt edged references. Address No. 1278.

WANT position as superintendent, or carder and spinner. Especially experienced in card room. Can give fine references and good reason for wanting to change. Address No. 1279.

WANT position as carder in large mill or superintendent of small mill on hosiery yarns. Now employed and giving satisfaction, but prefer to change. Good references. Address No. 1280.

WANT position as chief engineer and master machinist. 12 years experience. Strictly sober. Good manager of help and can keep plant in tip-top shape at low cost. Address No. 1281.

Commonwealth Hotel

INCORPORATED

Opposite State House, Boston, Mass.



Offers rooms with hot and cold water for \$1, which includes free use of public shower baths.

NOTHING TO EQUAL THIS IN NEW ENGLAND

Rooms with private baths for \$1.50 per day; suites of two rooms and bath for \$4.00 per day.

ABSOLUTELY FIREPROOF

Temperance House

Send for Booklet

STORER F. CRAFTS, Gen. Mgr.

WANT position as master mechanic. 20 years experience and can furnish fine references. Have 2 doffers and 1 spinner. Am strictly sober. Address No. 1282.

WANT position as superintendent or overseer of spinning. Age 38. Held last position five years and can furnish very satisfactory references from South Carolina mills. Address No. 1283.

WANT position as carder and spinner. Now employed but have good reasons for desiring to change. Can get results and can give present employers as references. Address No. 1284.

WANT a position as overseer in small spinning room, or second hand in larger room. Have had ten years experience in spinning and spooling. Age 30. Married strictly sober. Address No. 1285.

WANT position as overseer of spinning, spooling, warping and slashing. Have 15 years experience in that line. Married. Can give good references. Address 1286.

WANT position as overseer of spinning or as second hand in large room. Experienced on 4s to 60s, warp, hosiery and mercerizing yarns, single and ply. Married. Age 39. Can furnish references as to ability and character. Address No. 1287.

WANT position as chief engineer or master mechanic. Have 12 years experience and am now employed, but wish to change. Address No. 1288.

WANT position as overseer of weaving. Now employed, but want larger job. Have had long experience as overseer spinning and class of references. Address No. 1289.

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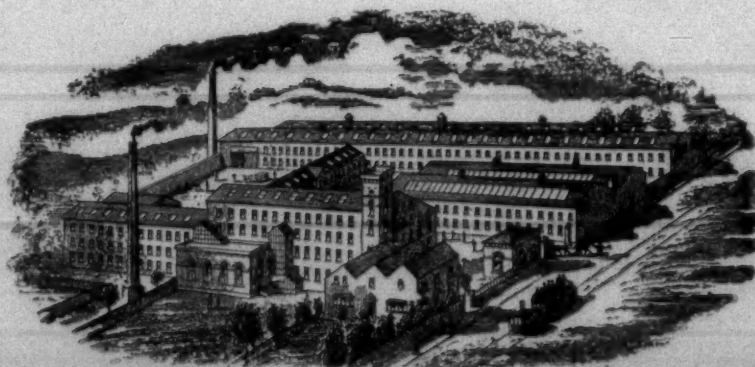
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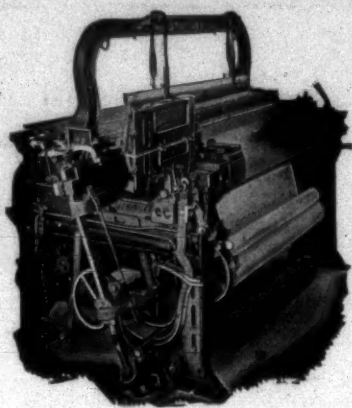
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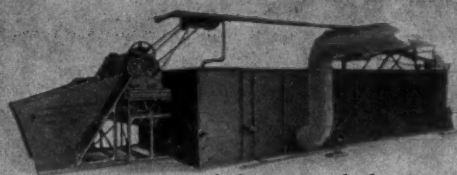
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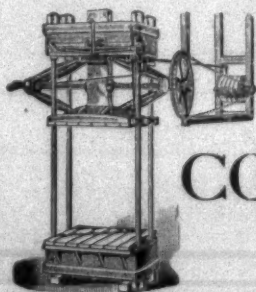
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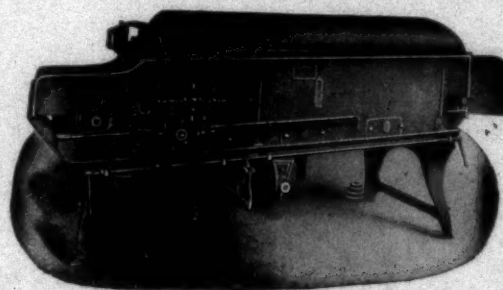
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